STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Thorne 4-21-3-2WH

2. TYPE OF WORK
DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
WILDCAT

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
NEWFIELD PRODUCTION COMPANY

7. OPERATOR PHONE
435 646-4825

8. ADDRESS OF OPERATOR
Rt 3 Box 3630 , Myton, UT, 84052

9. OPERATOR E-MAIL
mcrozier@newfield.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
Patented

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ◉

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ◉

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Dallas E. and Martha J. Murray

14. SURFACE OWNER PHONE (if box 12 = 'fee')
435-646-3244

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
P.O. Box 96, Myton, UT 84052

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ◉

19. SLANT
VERTICAL ○ DIRECTIONAL ○ HORIZONTAL ◉

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	223 FNL 1008 FWL	NWNW	21	3.0 S	2.0 W	U
Top of Uppermost Producing Zone	223 FNL 1008 FWL	NWNW	21	3.0 S	2.0 W	U
At Total Depth	670 FSL 1008 FWL	SWSW	21	3.0 S	2.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
223

23. NUMBER OF ACRES IN DRILLING UNIT
40

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
0

26. PROPOSED DEPTH
MD: 12257 TVD: 7888

27. ELEVATION - GROUND LEVEL
5150

28. BOND NUMBER
B001834

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
437478

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	17.5	14	0 - 60	37.0	H-40 ST&C	0.0	Class G	35	1.17	15.8
SURF	12.25	9.625	0 - 2500	36.0	J-55 ST&C	0.0	Premium Lite High Strength	204	3.53	11.0
							Class G	154	1.17	15.8
I1	8.75	7	0 - 8342	26.0	P-110 Other	10.5	Premium Lite High Strength	250	3.53	11.0
							50/50 Poz	313	1.24	14.3
PROD	6.125	4.5	7455 - 12257	13.5	P-110 Other	10.5	No Used	0	0.0	0.0

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☑ COMPLETE DRILLING PLAN
☑ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
☑ TOPOGRAPHICAL MAP

NAME Don Hamilton **TITLE** Permitting Agent **PHONE** 435 719-2018

SIGNATURE **DATE** 11/17/2011 **EMAIL** starpoint@etv.net

API NUMBER ASSIGNED
43013510670000

APPROVAL
Permit Manager

RECEIVED: December 29, 2011

Newfield Production Company
Thorne 4-21-3-2WH
Surface Hole Location: 223' FNL, 1008' FWL, Section 21, T3S, R2W
Bottom Hole Location: 670' FSL, 1008' FWL, Section 21, T3S, R2W
Duchesne County, UT

Drilling Program

1. Formation Tops

Uinta	surface
Green River	3,365'
Garden Gulch member	6,100'
Wasatch	8,585'
Pilot Hole TD	8,785'
Lateral TD	7,888' TVD / 12,257' MD

2. Depth to Oil, Gas, Water, or Minerals

Base of moderately saline	626'	(water)
Green River	6,100' - 7,888'	(oil)

Note: The pilot hole will be drilled into the Wasatch formation for evaluation and targeting purposes only. The lateral will be drilled in the Green River formation.

3. Pressure Control

Section	BOP Description
Surface	12-1/4" diverter
Interm/Prod	The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 5M system. A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 psi will be used.

4. Casing

Description	Interval		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Conductor 14	0'	60'	37	H-40	Weld	--	--	--	-- --	-- --	-- --
Surface 9 5/8	0'	2,500'	36	J-55	STC	8.33	8.33	12	3,520 2.51	2,020 2.54	394,000 4.38
Intermediate 7	0'	8,026' 8,342'	26	P-110	BTC	10	10.5	15	9,960 2.95	6,210 1.73	830,000 3.83
Production 4 1/2	7,455'	7,888' 12,257'	13.5	P-110	BTC	10	10.5	--	12,410 3.75	10,670 3.03	422,000 6.51

RECEIVED: November 17, 2011

Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)
Intermediate casing MASP = (reservoir pressure) - (gas gradient)
Production casing MASP = (reservoir pressure) - (gas gradient)
All collapse calculations assume fully evacuated casing with a gas gradient
All tension calculations assume air weight of casing
Gas gradient = 0.1 psi/ft

All casing shall be new.
All casing strings shall have a minimum of 1 centralizer on each of the bottom 3 joints.

5. Cement

Job	Hole Size	Fill	Slurry Description	ft^3 / sacks	OH excess	Weight (ppg)	Yield (ft^3/sk)
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	41 / 35	15%	15.8	1.17
Surface Lead	12 1/4	2,000'	Premium Lite II w/ 3% KCl + 10% bentonite	720 / 204	15%	11.0	3.53
Surface Tail	12 1/4	500'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	180 / 154	15%	15.8	1.17
Pilot Hole Plug Back	8 3/4	1,016'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	488 / 394	15%	14.3	1.24
Intermediate Lead	8 3/4	5,100'	Premium Lite II w/ 3% KCl + 10% bentonite	882 / 250	15%	11.0	3.53
Intermediate Tail	8 3/4	2,242'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	388 / 313	15%	14.3	1.24
Production	6 1/8	--	Liner will not be cemented. It will be isolated with a liner top packer.	-- / --	--	--	--

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

Actual cement volumes for the pilot hole plug back and the intermediate casing string will be calculated from an open hole caliper log, plus 15% excess.

The production liner will be left uncemented. Individual frac stages will be isolated with open hole packers. A liner top hanger and packer will be installed 50' above KOP.

6. Type and Characteristics of Proposed Circulating Medium

Interval **Description**

Surface - 2,500'

An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.

RECEIVED: November 17, 2011

2,500'	- TD	A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite. Anticipated maximum mud weight is 10.5 ppg.

7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the top of the Garden Gulch formation. A cement bond log will be run from PBTD to the cement top behind the production casing.

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.52 psi/ft gradient.

7,888' x 0.52 psi/ft = 4102 psi

No abnormal temperature is expected. No H_2S is expected.

9. Other Aspects

An 8-3/4" pilot hole will be drilled in order to determine the depth to the lateral target zone.
The pilot hole will be logged, and then plugged back in prepartion for horizontal operations.
Directional tools will then be used to build to 92.02 degrees inclination.
The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

The lateral will be drilled to the bottomhole location shown on the plat.
A liner with a system of open hole packers will be used to provide multi-stage frac isolation in the lateral. The top of the liner will be place 50' above KOP and will be isolated with a liner top packer.

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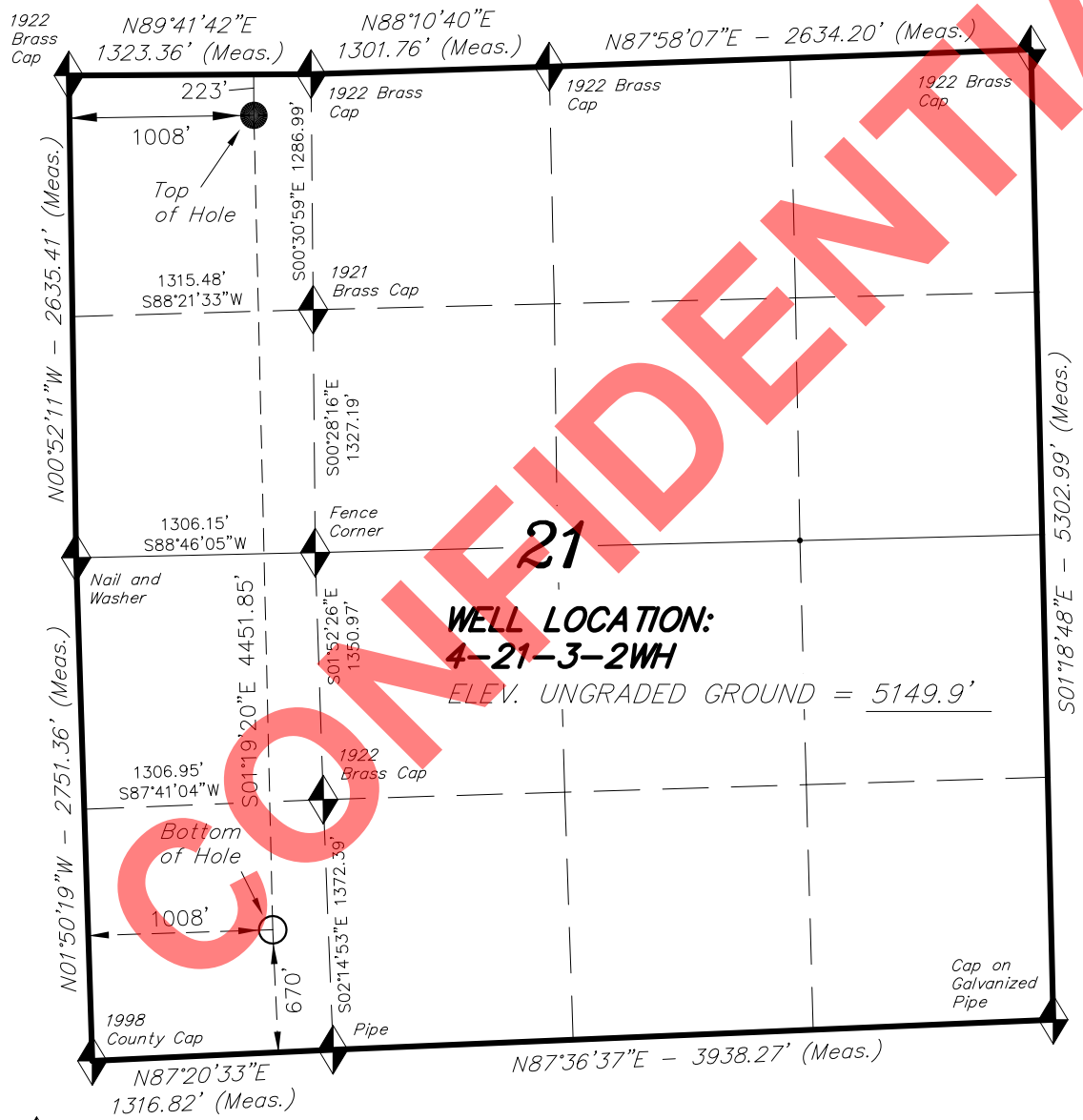
API Well Number: 43013510670000

T3S, R2W, U.S.B.&M.



◆ = SECTION CORNERS LOCATED

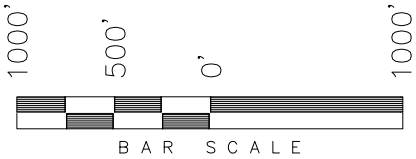
BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

4-21-3-2WH
(Surface Location) NAD 83
LATITUDE = 40° 12' 50.56"
LONGITUDE = 110° 07' 12.02"

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, 4-21-3-2WH, LOCATED AS SHOWN IN THE NW 1/4 NW 1/4 OF SECTION 21, T3S, R2W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, 4-21-3-2WH, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 21, T3S, R2W, U.S.B.&M. DUCHESNE COUNTY, UTAH.



NOTES:
1. *Well footages are measured at right angles to the Section Lines.*
2. *Bearings are based on Global Positioning Satellite observations.*

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No. 189377 11-11-11 STACY W. STEWART STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

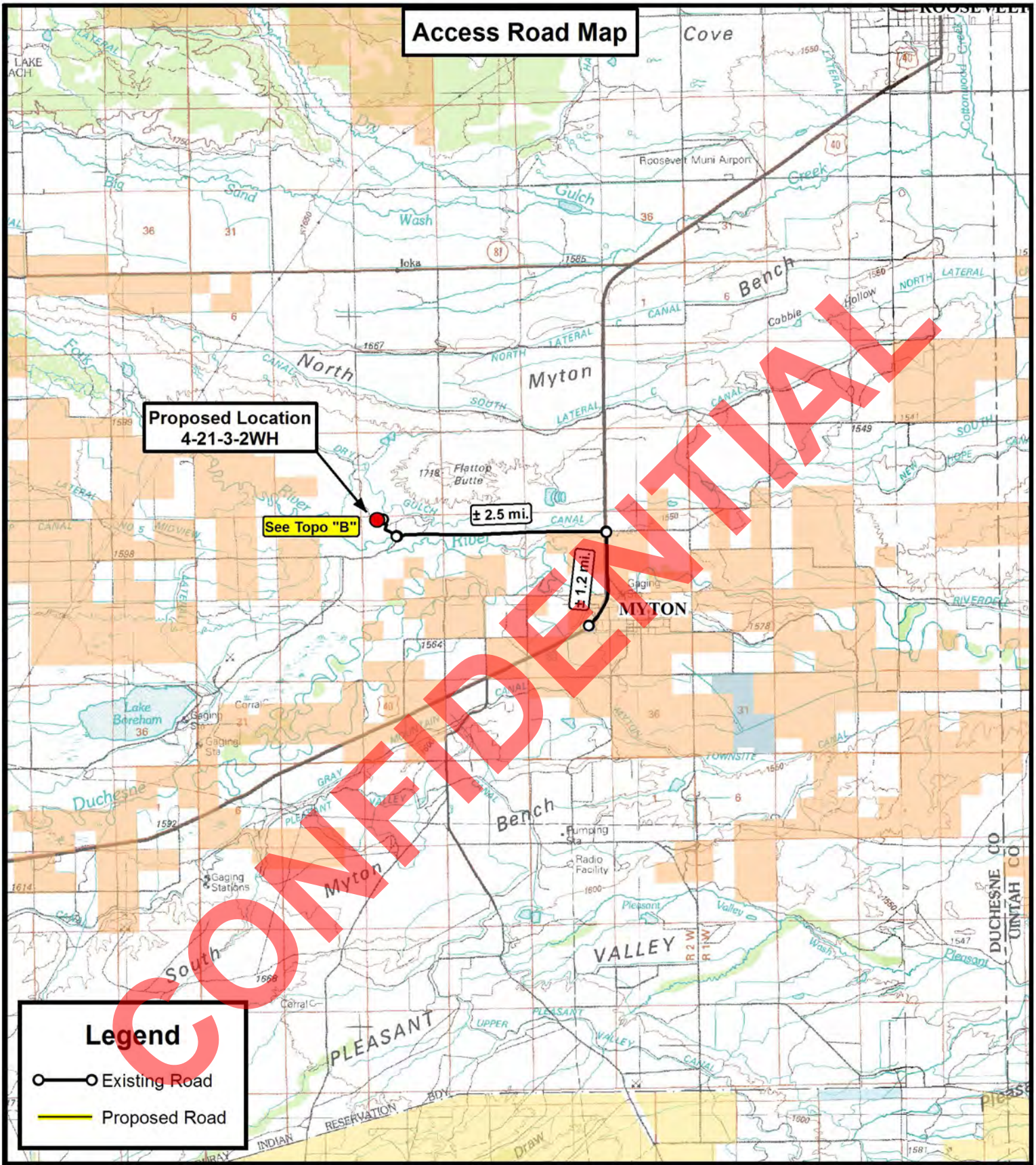
CONFIDENTIAL

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 11-04-11	SURVEYED BY: D.P.	VERSION:
DATE DRAWN: 11-07-11	DRAWN BY: F.T.M.	V1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: November 17, 2011

API Well Number: 43013510670000



Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

NEWFIELD EXPLORATION COMPANY

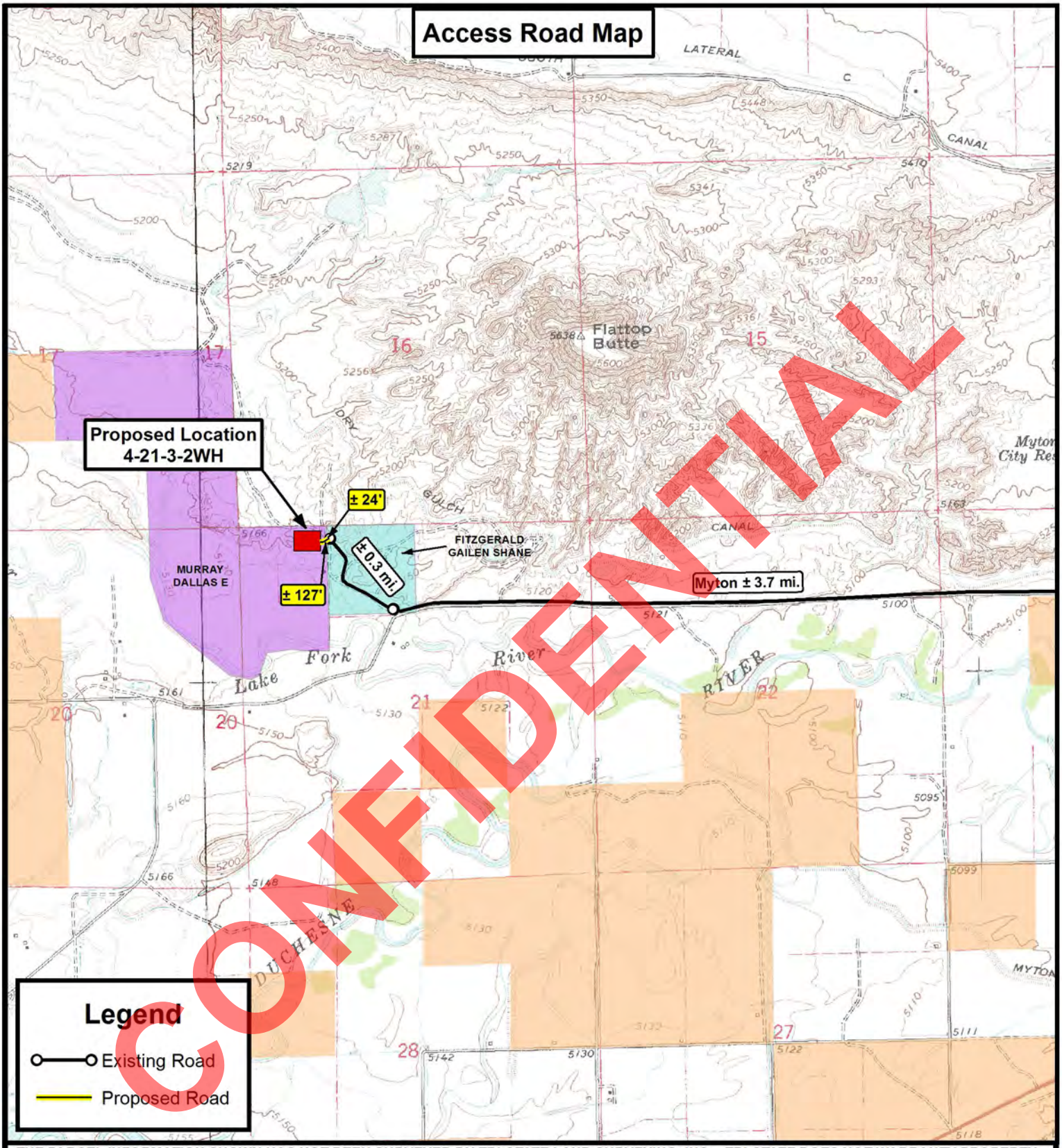
4-21-3-2WH
SEC. 21, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	11-09-2011		V1
SCALE:	1:100,000		

TOPOGRAPHIC MAP

SHEET A

API Well Number: 43013510670000



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NEWFIELD EXPLORATION COMPANY

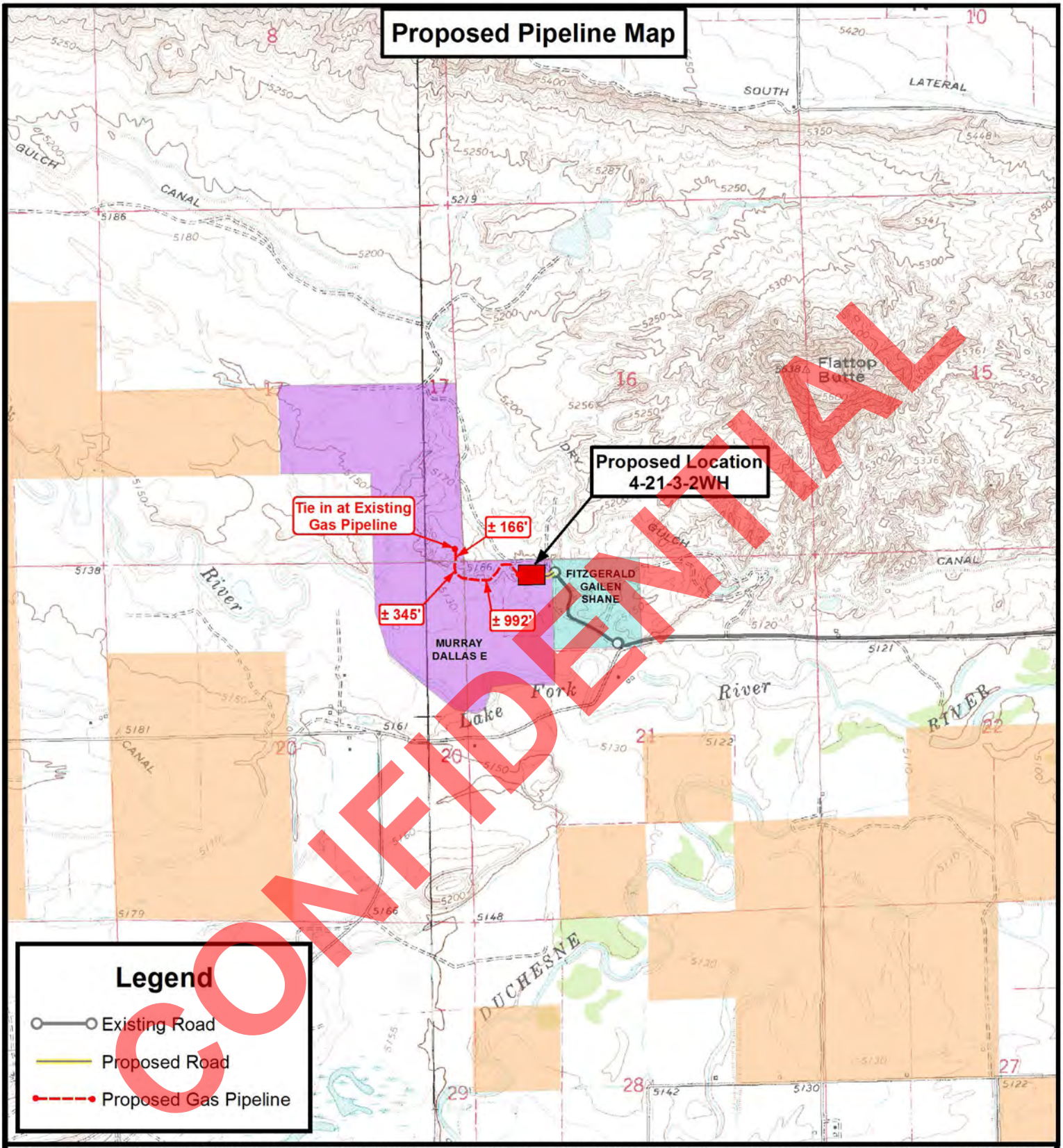
4-21-3-2WH
SEC. 21, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	11-09-2011		V1
SCALE:	1 " = 2,000 '		

TOPOGRAPHIC MAP

SHEET B

API Well Number: 43013510670000



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P: (435) 781-2501
F: (435) 781-2518

N

NEWFIELD EXPLORATION COMPANY

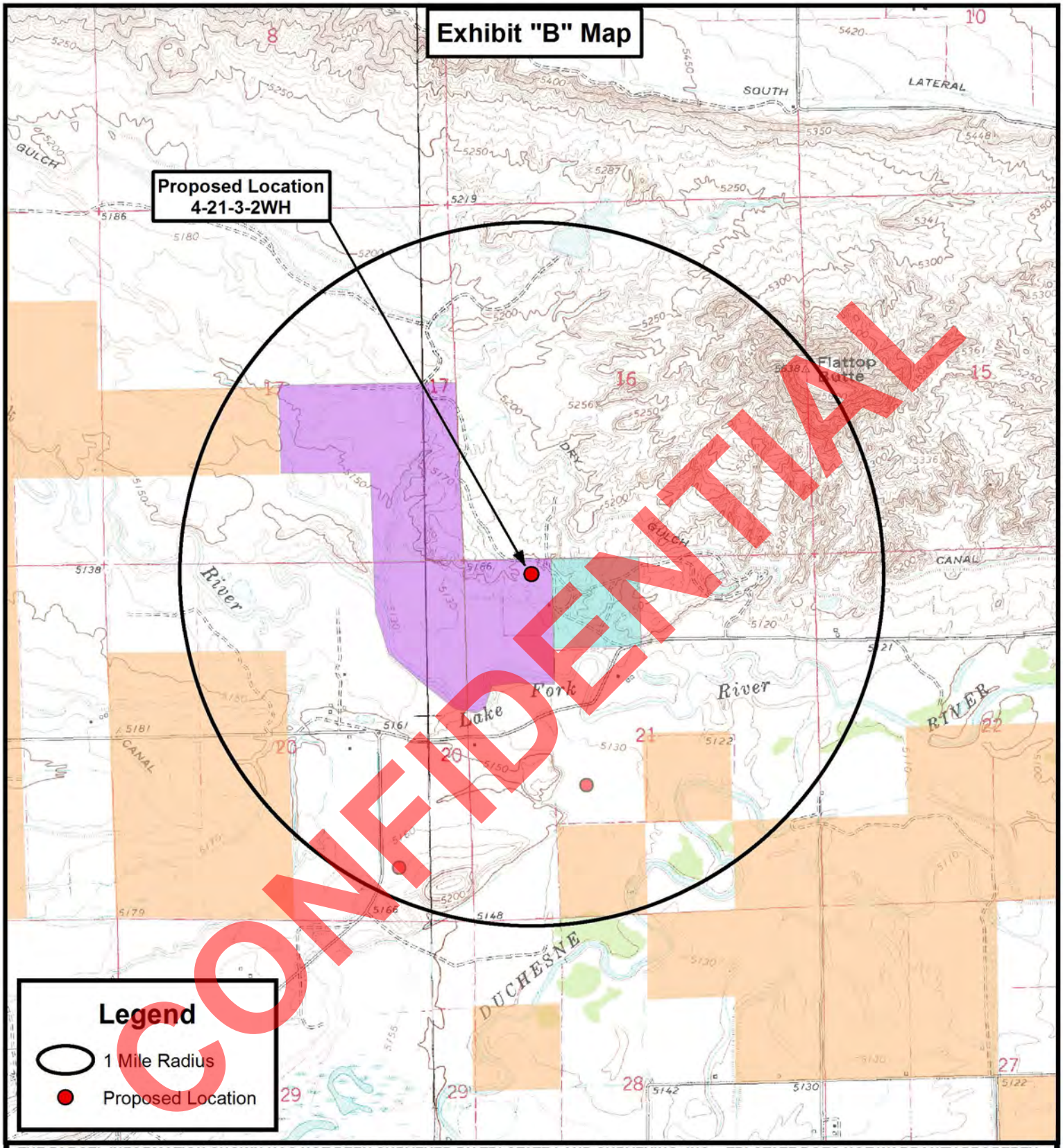
4-21-3-2WH
SEC. 21, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	11-09-2011		V1
SCALE:	1 " = 2,000 '		

TOPOGRAPHIC MAP

SHEET C

API Well Number: 43013510670000



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NEWFIELD EXPLORATION COMPANY

4-21-3-2WH
SEC. 21, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	11-09-2011		V1
SCALE:	1 " = 2,000 '		

TOPOGRAPHIC MAP

SHEET D

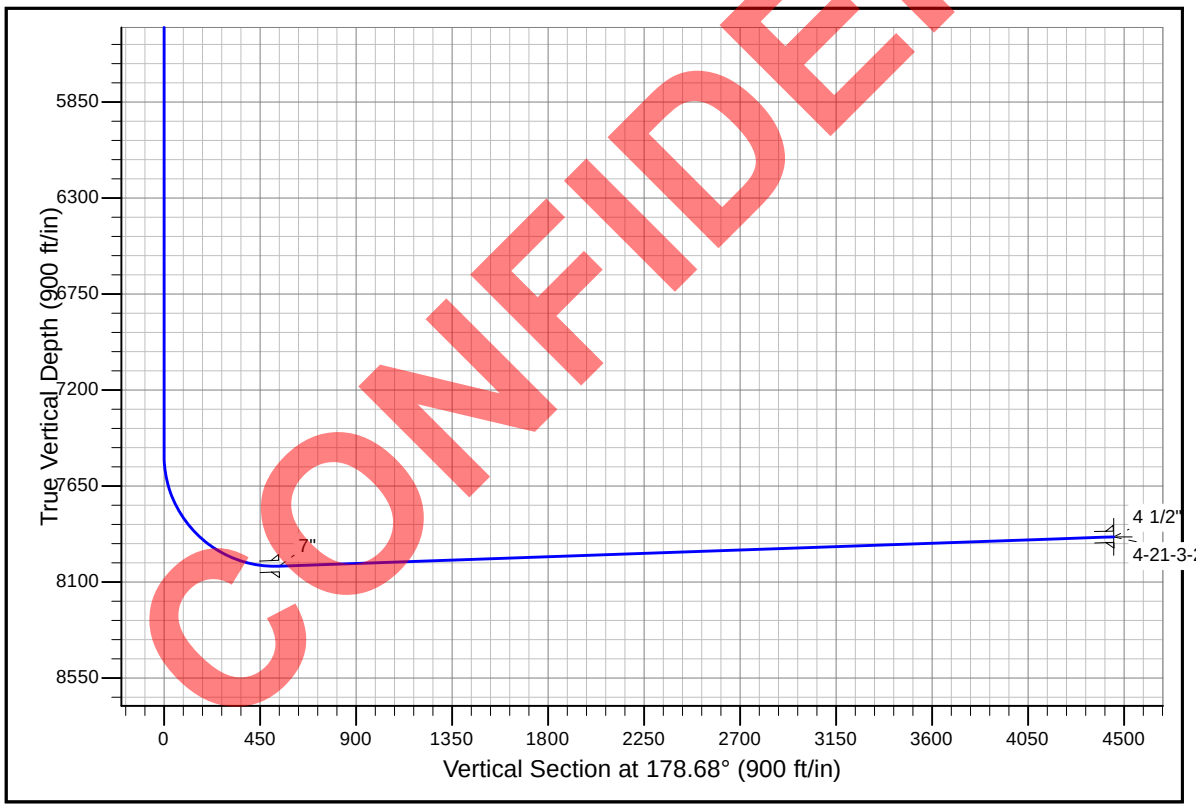
API Well Number: 43013510670000

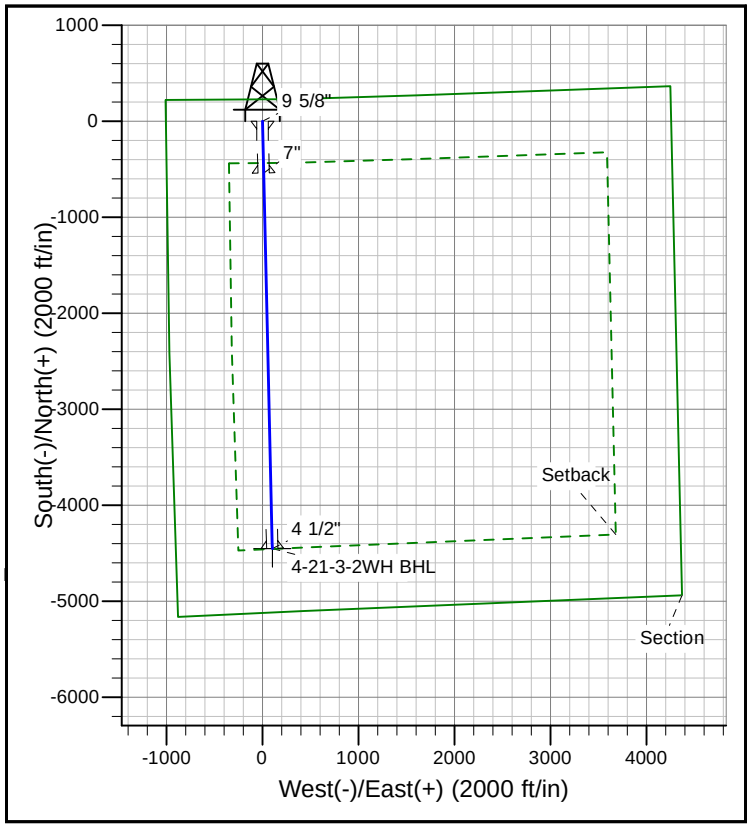
Newfield Production Company

Project: Uinta Basin
Site: Thorne 4-21-3-2WH
Well: Thorne 4-21-3-2WH
Wellbore: Thorne 4-21-3-2WH
Design: Design #2

T M
Azimuths to True North
Magnetic North: 11.29°

Magnetic Field
Strength: 52356.5snT
Dip Angle: 65.92°
Date: 11/10/2011
Model: IGRF200510





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	7505.4	0.00	0.00	7505.4	0.0	0.0	0.00	0.00	0.0	
3	8341.9	92.02	178.68	8025.9	-539.1	12.4	11.00	178.68	539.2	
4	12257.0	92.02	178.68	7888.0	-4450.7	102.7	0.00	0.00	4451.9	4-21-3-2W BKSH BHL

PROJECT DETAILS: Uinta Basin

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Utah Central Zone

System Datum: Mean Sea Level

RECEIVED: November 17, 2011

Newfield Production Company

Uinta Basin
Thorne 4-21-3-2WH
Thorne 4-21-3-2WH

Thorne 4-21-3-2WH

Plan: Design #2

Standard Planning Report

17 November, 2011

RECEIVED: November 17, 2011

Newfield Exploration

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Thorne 4-21-3-2WH
Company:	Newfield Production Company	**TVD Reference:**	RKB @ 5168.0ft
Project:	Uinta Basin	**MD Reference:**	RKB @ 5168.0ft
Site:	Thorne 4-21-3-2WH	**North Reference:**	True
Well:	Thorne 4-21-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Thorne 4-21-3-2WH		
Design:	Design #2		

Project Uinta Basin

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Thorne 4-21-3-2WH

Site Position:		**Northing:**	2,209,702.15 m	**Latitude:**	40° 12' 50.560 N
From:	Lat/Long	**Easting:**	617,460.30 m	**Longitude:**	110° 7' 12.020 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	0.000 in	**Grid Convergence:**	0.88 °

Well Thorne 4-21-3-2WH

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,209,702.15 m	**Latitude:**	40° 12' 50.560 N
	+E/-W	0.0 ft	**Easting:**	617,460.30 m	**Longitude:**	110° 7' 12.020 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**		**Ground Level:**	5,150.0 ft

Wellbore Thorne 4-21-3-2WH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/10/2011	11.29	65.92	52,356

Design Design #2

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	178.68

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,505.4	0.00	0.00	7,505.4	0.0	0.0	0.00	0.00	0.00	0.00	
8,341.9	92.02	178.68	8,025.9	-539.1	12.4	11.00	11.00	0.00	178.68	
12,257.0	92.02	178.68	7,888.0	-4,450.7	102.7	0.00	0.00	0.00	0.00	4-21-3-2W BKSH B

Newfield Exploration

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Thorne 4-21-3-2WH
Company:	Newfield Production Company	**TVD Reference:**	RKB @ 5168.0ft
Project:	Uinta Basin	**MD Reference:**	RKB @ 5168.0ft
Site:	Thorne 4-21-3-2WH	**North Reference:**	True
Well:	Thorne 4-21-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Thorne 4-21-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"									
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00

Newfield Exploration

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Thorne 4-21-3-2WH
Company:	Newfield Production Company	**TVD Reference:**	RKB @ 5168.0ft
Project:	Uinta Basin	**MD Reference:**	RKB @ 5168.0ft
Site:	Thorne 4-21-3-2WH	**North Reference:**	True
Well:	Thorne 4-21-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Thorne 4-21-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,505.4	0.00	0.00	7,505.4	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	10.41	178.68	7,599.5	-8.6	0.2	8.6	11.00	11.00	0.00
7,700.0	21.41	178.68	7,695.5	-35.9	0.8	35.9	11.00	11.00	0.00
7,800.0	32.41	178.68	7,784.5	-81.1	1.9	81.1	11.00	11.00	0.00
7,900.0	43.41	178.68	7,863.3	-142.4	3.3	142.5	11.00	11.00	0.00
8,000.0	54.41	178.68	7,928.9	-217.7	5.0	217.7	11.00	11.00	0.00
8,100.0	65.41	178.68	7,979.0	-304.0	7.0	304.1	11.00	11.00	0.00
8,200.0	76.41	178.68	8,011.7	-398.4	9.2	398.5	11.00	11.00	0.00
8,300.0	87.41	178.68	8,025.7	-497.2	11.5	497.3	11.00	11.00	0.00
8,341.9	92.02	178.68	8,025.9	-539.1	12.4	539.2	11.00	11.00	0.00
7"									
8,400.0	92.02	178.68	8,023.9	-597.1	13.8	597.3	0.00	0.00	0.00
8,500.0	92.02	178.68	8,020.4	-697.0	16.1	697.2	0.00	0.00	0.00
8,600.0	92.02	178.68	8,016.8	-796.9	18.4	797.1	0.00	0.00	0.00
8,700.0	92.02	178.68	8,013.3	-896.8	20.7	897.1	0.00	0.00	0.00
8,800.0	92.02	178.68	8,009.8	-996.8	23.0	997.0	0.00	0.00	0.00
8,900.0	92.02	178.68	8,006.3	-1,096.7	25.3	1,097.0	0.00	0.00	0.00
9,000.0	92.02	178.68	8,002.7	-1,196.6	27.6	1,196.9	0.00	0.00	0.00
9,100.0	92.02	178.68	7,999.2	-1,296.5	29.9	1,296.8	0.00	0.00	0.00
9,200.0	92.02	178.68	7,995.7	-1,396.4	32.2	1,396.8	0.00	0.00	0.00
9,300.0	92.02	178.68	7,992.2	-1,496.3	34.5	1,496.7	0.00	0.00	0.00
9,400.0	92.02	178.68	7,988.7	-1,596.2	36.8	1,596.6	0.00	0.00	0.00
9,500.0	92.02	178.68	7,985.1	-1,696.1	39.1	1,696.6	0.00	0.00	0.00
9,600.0	92.02	178.68	7,981.6	-1,796.0	41.4	1,796.5	0.00	0.00	0.00
9,700.0	92.02	178.68	7,978.1	-1,896.0	43.8	1,896.5	0.00	0.00	0.00
9,800.0	92.02	178.68	7,974.6	-1,995.9	46.1	1,996.4	0.00	0.00	0.00
9,900.0	92.02	178.68	7,971.0	-2,095.8	48.4	2,096.3	0.00	0.00	0.00
10,000.0	92.02	178.68	7,967.5	-2,195.7	50.7	2,196.3	0.00	0.00	0.00
10,100.0	92.02	178.68	7,964.0	-2,295.6	53.0	2,296.2	0.00	0.00	0.00
10,200.0	92.02	178.68	7,960.5	-2,395.5	55.3	2,396.1	0.00	0.00	0.00

RECEIVED: November 17, 2011

Newfield Exploration

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Thorne 4-21-3-2WH
Company:	Newfield Production Company	**TVD Reference:**	RKB @ 5168.0ft
Project:	Uinta Basin	**MD Reference:**	RKB @ 5168.0ft
Site:	Thorne 4-21-3-2WH	**North Reference:**	True
Well:	Thorne 4-21-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Thorne 4-21-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,300.0	92.02	178.68	7,956.9	-2,495.4	57.6	2,496.1	0.00	0.00	0.00
10,400.0	92.02	178.68	7,953.4	-2,595.3	59.9	2,596.0	0.00	0.00	0.00
10,500.0	92.02	178.68	7,949.9	-2,695.2	62.2	2,696.0	0.00	0.00	0.00
10,600.0	92.02	178.68	7,946.4	-2,795.2	64.5	2,795.9	0.00	0.00	0.00
10,700.0	92.02	178.68	7,942.9	-2,895.1	66.8	2,895.8	0.00	0.00	0.00
10,800.0	92.02	178.68	7,939.3	-2,995.0	69.1	2,995.8	0.00	0.00	0.00
10,900.0	92.02	178.68	7,935.8	-3,094.9	71.4	3,095.7	0.00	0.00	0.00
11,000.0	92.02	178.68	7,932.3	-3,194.8	73.7	3,195.7	0.00	0.00	0.00
11,100.0	92.02	178.68	7,928.8	-3,294.7	76.0	3,295.6	0.00	0.00	0.00
11,200.0	92.02	178.68	7,925.2	-3,394.6	78.3	3,395.5	0.00	0.00	0.00
11,300.0	92.02	178.68	7,921.7	-3,494.5	80.6	3,495.5	0.00	0.00	0.00
11,400.0	92.02	178.68	7,918.2	-3,594.4	83.0	3,595.4	0.00	0.00	0.00
11,500.0	92.02	178.68	7,914.7	-3,694.4	85.3	3,695.3	0.00	0.00	0.00
11,600.0	92.02	178.68	7,911.1	-3,794.3	87.6	3,795.3	0.00	0.00	0.00
11,700.0	92.02	178.68	7,907.6	-3,894.2	89.9	3,895.2	0.00	0.00	0.00
11,800.0	92.02	178.68	7,904.1	-3,994.1	92.2	3,995.2	0.00	0.00	0.00
11,900.0	92.02	178.68	7,900.6	-4,094.0	94.5	4,095.1	0.00	0.00	0.00
12,000.0	92.02	178.68	7,897.1	-4,193.9	96.8	4,195.0	0.00	0.00	0.00
12,100.0	92.02	178.68	7,893.5	-4,293.8	99.1	4,295.0	0.00	0.00	0.00
12,200.0	92.02	178.68	7,890.0	-4,393.7	101.4	4,394.9	0.00	0.00	0.00
12,257.0	92.02	178.68	7,888.0	-4,450.7	102.7	4,451.8	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
4-21-3-2W BKSH BHL - plan hits target center - Point	0.00	0.00	7,888.0	-4,450.7	102.7	2,208,346.23	617,512.53	40° 12' 6.575 N	110° 7' 10.696 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,000.0	1,000.0	9 5/8"	9.625	12.250
8,341.9	8,025.9	7"	7.000	8.750
12,257.0	7,888.0	4 1/2"	4.500	6.125

AFFIDAVIT OF EASEMENT, RIGHT-OF-WAY AND SURFACE USE AGREEMENT

Christian C. Sizemore personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Christian C. Sizemore. I am a Landman for Newfield Production Company, whose address is 1001 17th Street, Suite 2000, Denver, CO 80202 ("Newfield").

2. Newfield is the Operator of the proposed Thorne 4-21-3-2WH well to be located in the NWNW of Section 21, Township 3 South, Range 2 West, Duchesne, County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Dallas E. Murray & Martha J. Murray, whose address is PO Box 96, Myton, UT 84052 ("Surface Owner").

3. Newfield and the Surface Owner have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated October 27, 2011 covering the Drillsite Location and access to the Drillsite Location.

FURTHER AFFIANT SAYETH NOT.

Christian C. Sizemore, Landman

ACKNOWLEDGEMENT

STATE OF COLORADO §
§
COUNTY OF DENVER §

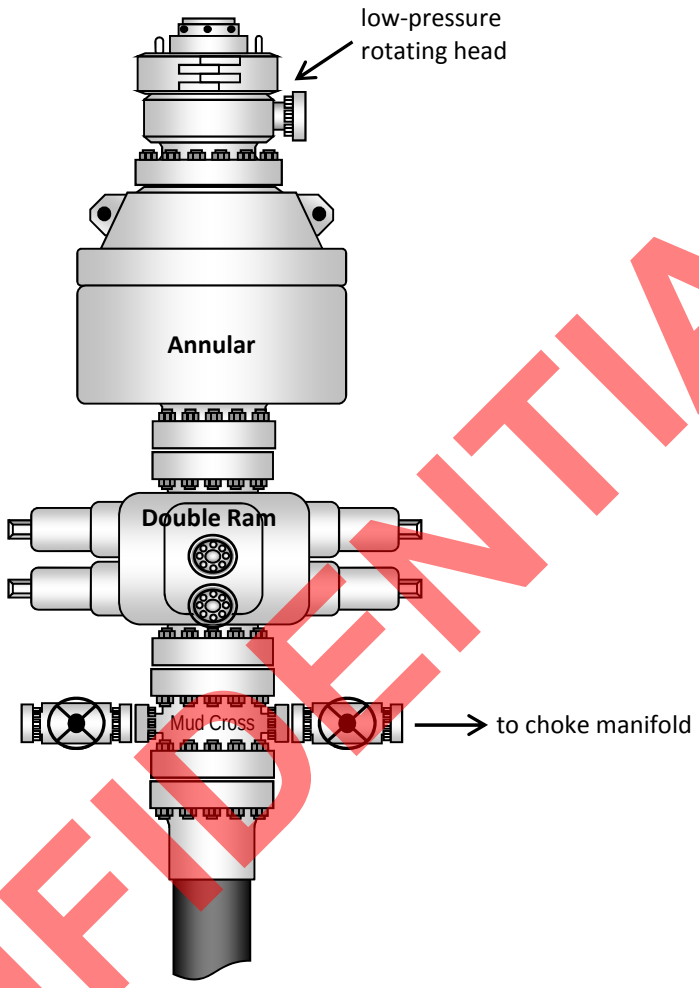
Before me, a Notary Public, in and for the State, on this 15th day of November, 2011, personally appeared Christian C. Sizemore, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that she executed the same as her own free and voluntary act and deed for the uses and purposes therein set forth.

NOTARY PUBLIC

My Commission Expires:

PETER BURNS
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 8/09/2015

Typical 5M BOP stack configuration



RECEIVED: November 17, 2011

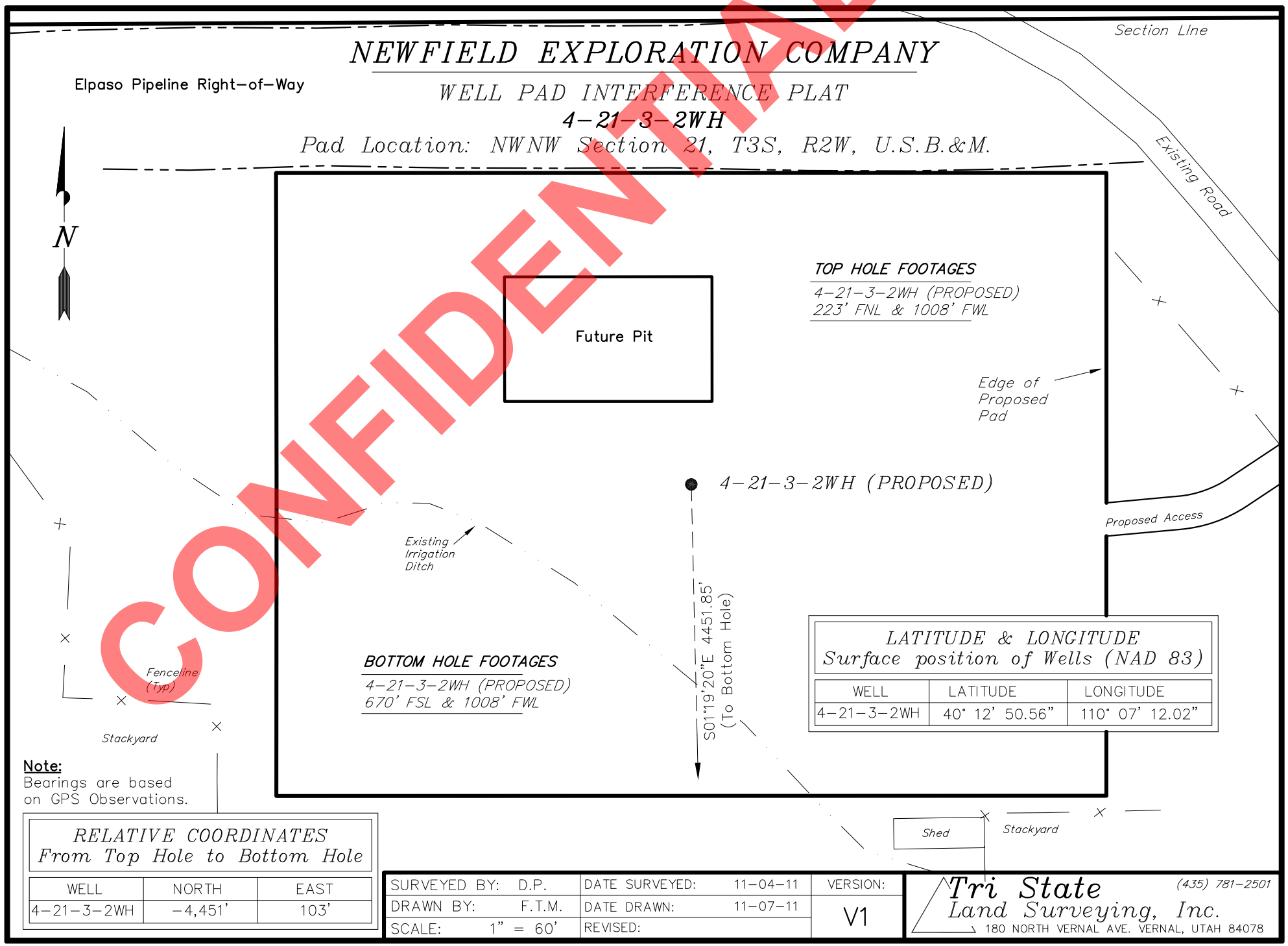
API Well Number: 43013510670000

NEWFIELD EXPLORATION COMPANY

WELL PAD INTERFERENCE PLAT

4-21-3-2WH

Pad Location: NWNW Section 21, T3S, R2W, U.S.B.&M.



CONFIDENTIAL

Note:
Bearings are based on GPS Observations.

LATITUDE & LONGITUDE
Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
4-21-3-2WH	40° 12' 50.56"	110° 07' 12.02"

RELATIVE COORDINATES
From Top Hole to Bottom Hole

WELL	NORTH	EAST
4-21-3-2WH	-4,451'	103'

SURVEYED BY: D.P.	DATE SURVEYED: 11-04-11	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: F.T.M.	DATE DRAWN: 11-07-11	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

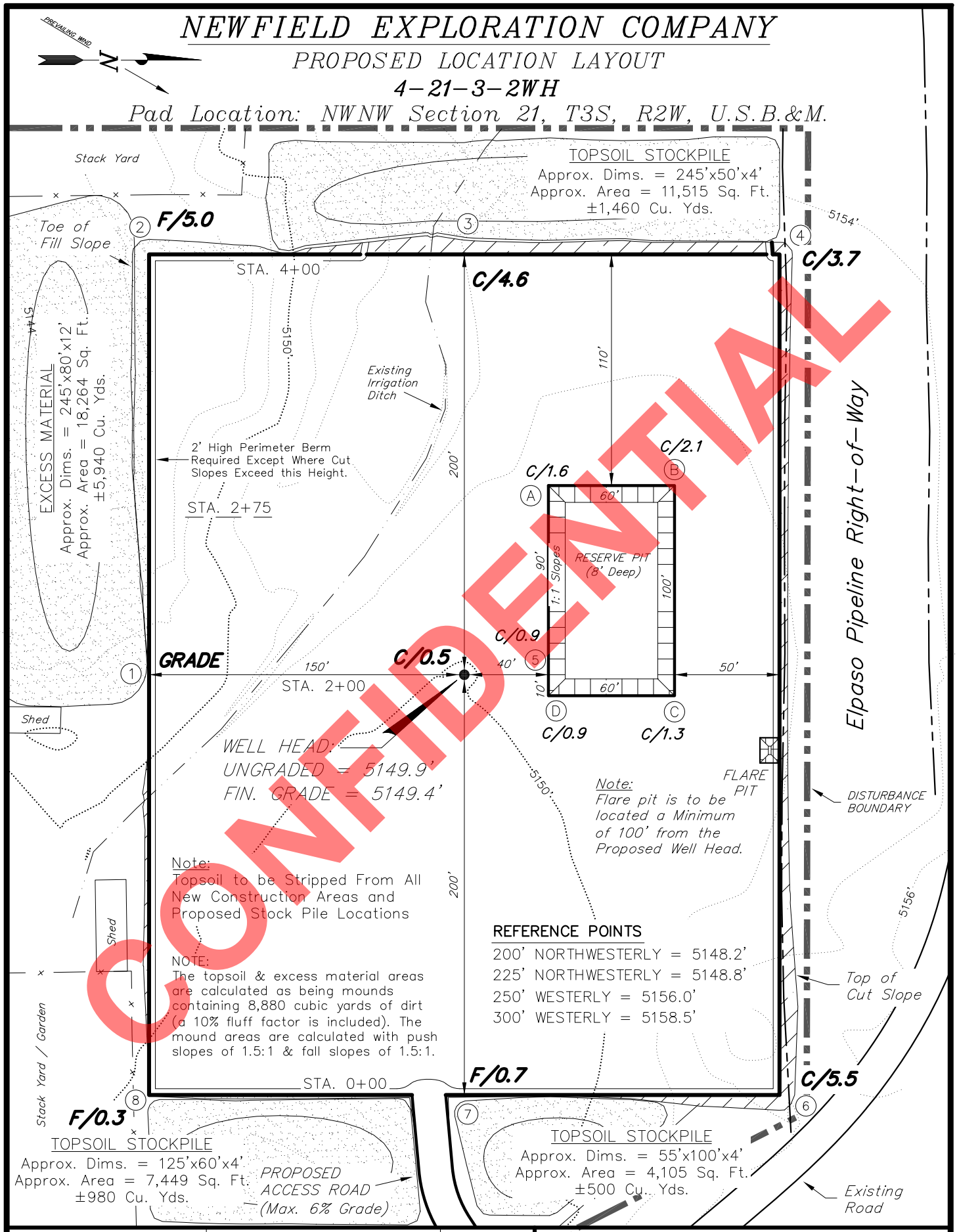
API Well Number: 43013510670000

NEWFIELD EXPLORATION COMPANY

PROPOSED LOCATION LAYOUT

4-21-3-2WH

Pad Location: NWNW Section 21, T3S, R2W, U.S.B.&M.



SURVEYED BY: D.P.	DATE SURVEYED: 11-04-11	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: F.T.M.	DATE DRAWN: 11-07-11	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

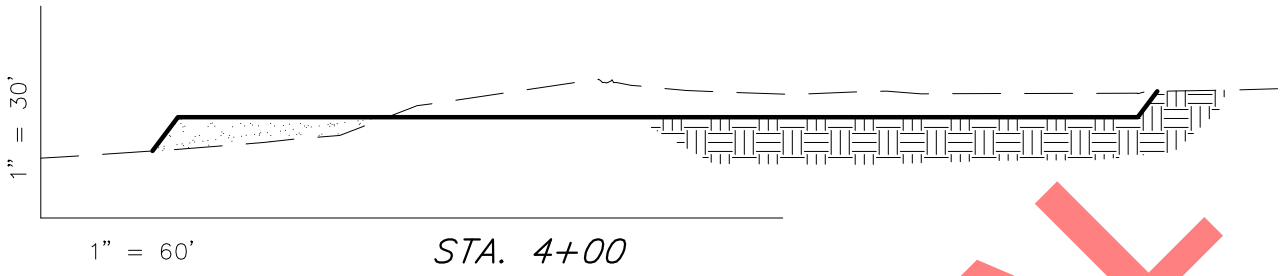
RECEIVED: November 17, 2011

NEWFIELD EXPLORATION COMPANY

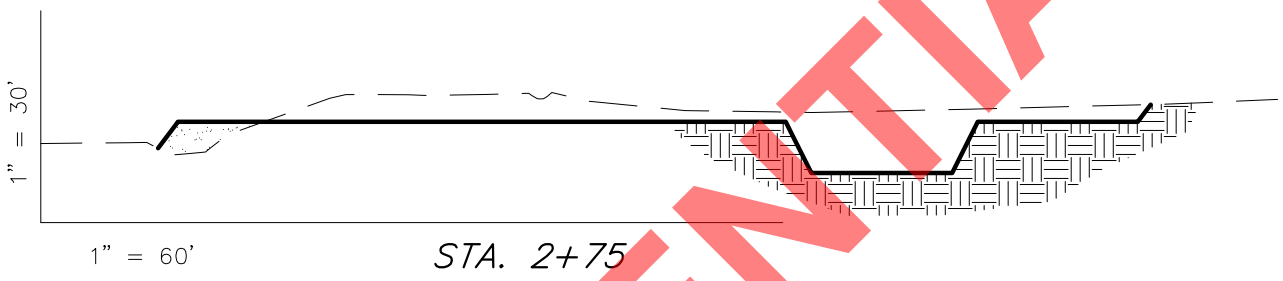
CROSS SECTIONS

4-21-3-2WH

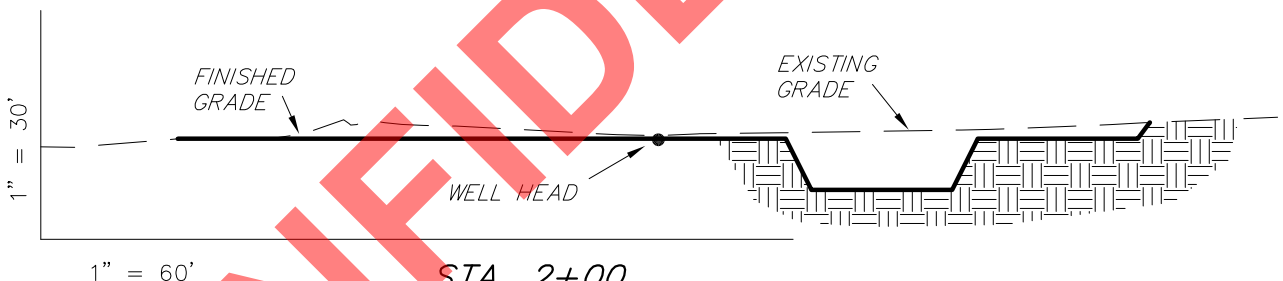
Pad Location: NWNW Section 21, T3S, R2W, U.S.B.&M.



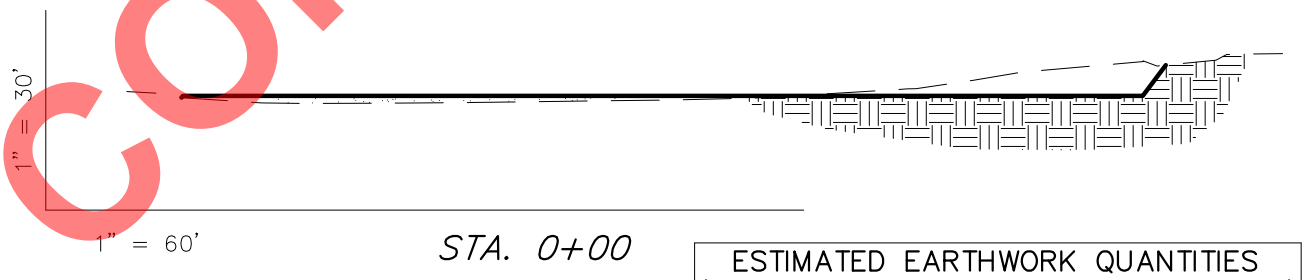
STA. 4+00



STA. 2+75



STA. 2+00



STA. 0+00

NOTE:
UNLESS OTHERWISE NOTED ALL CUT/FILL SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	5,960	1,980	Topsoil is not included in Pad Cut Volume	3,980
PIT	1,420	0		1,420
TOTALS	7,380	1,980	2,670	5,400

SURVEYED BY: D.P.	DATE SURVEYED: 11-04-11	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 11-07-11	V1
SCALE: 1" = 60'	REVISED:	

Tri State Land Surveying, Inc.
(435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

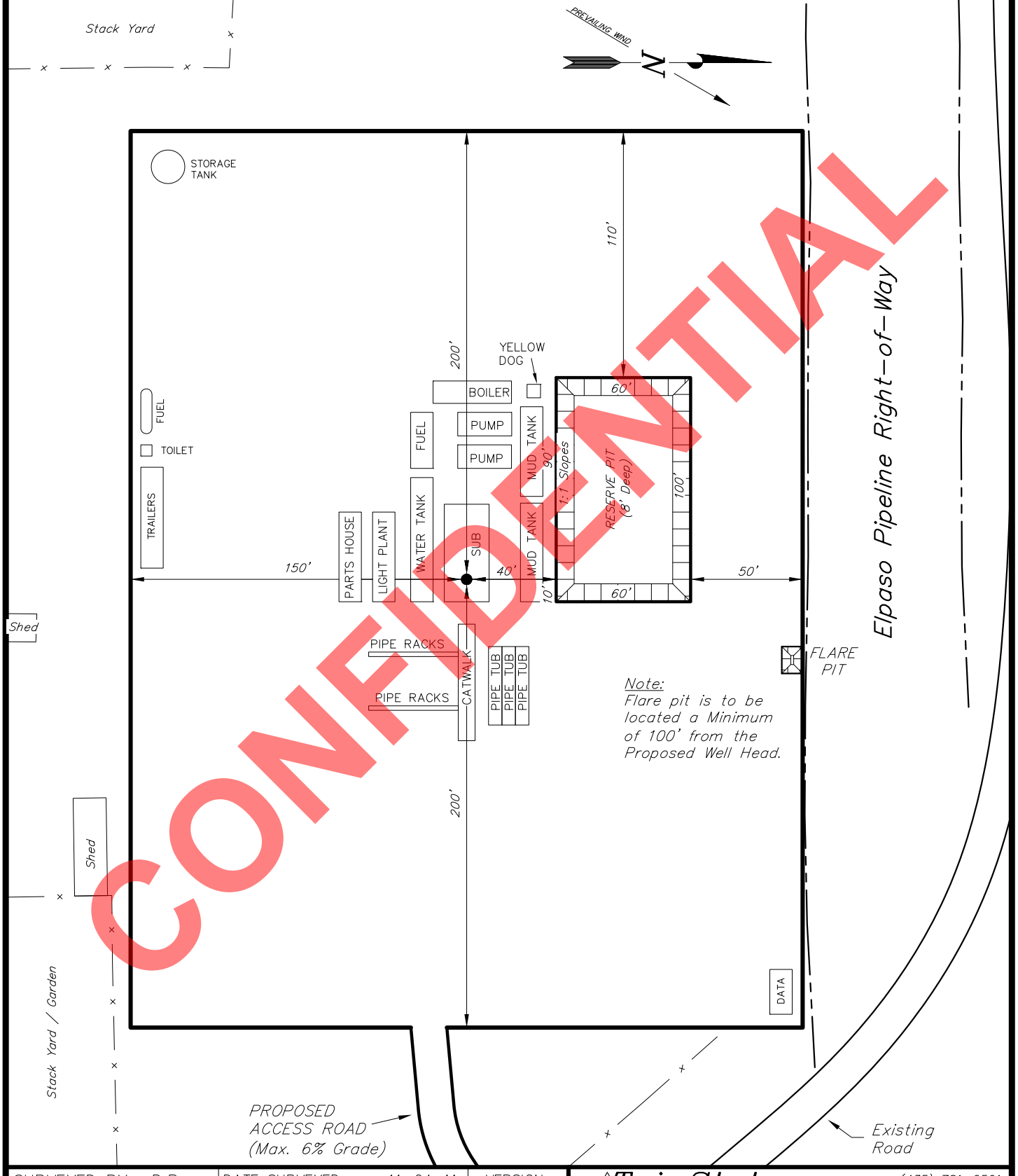
RECEIVED: November 17, 2011

NEWFIELD EXPLORATION COMPANY

TYPICAL RIG LAYOUT

4-21-3-2WH

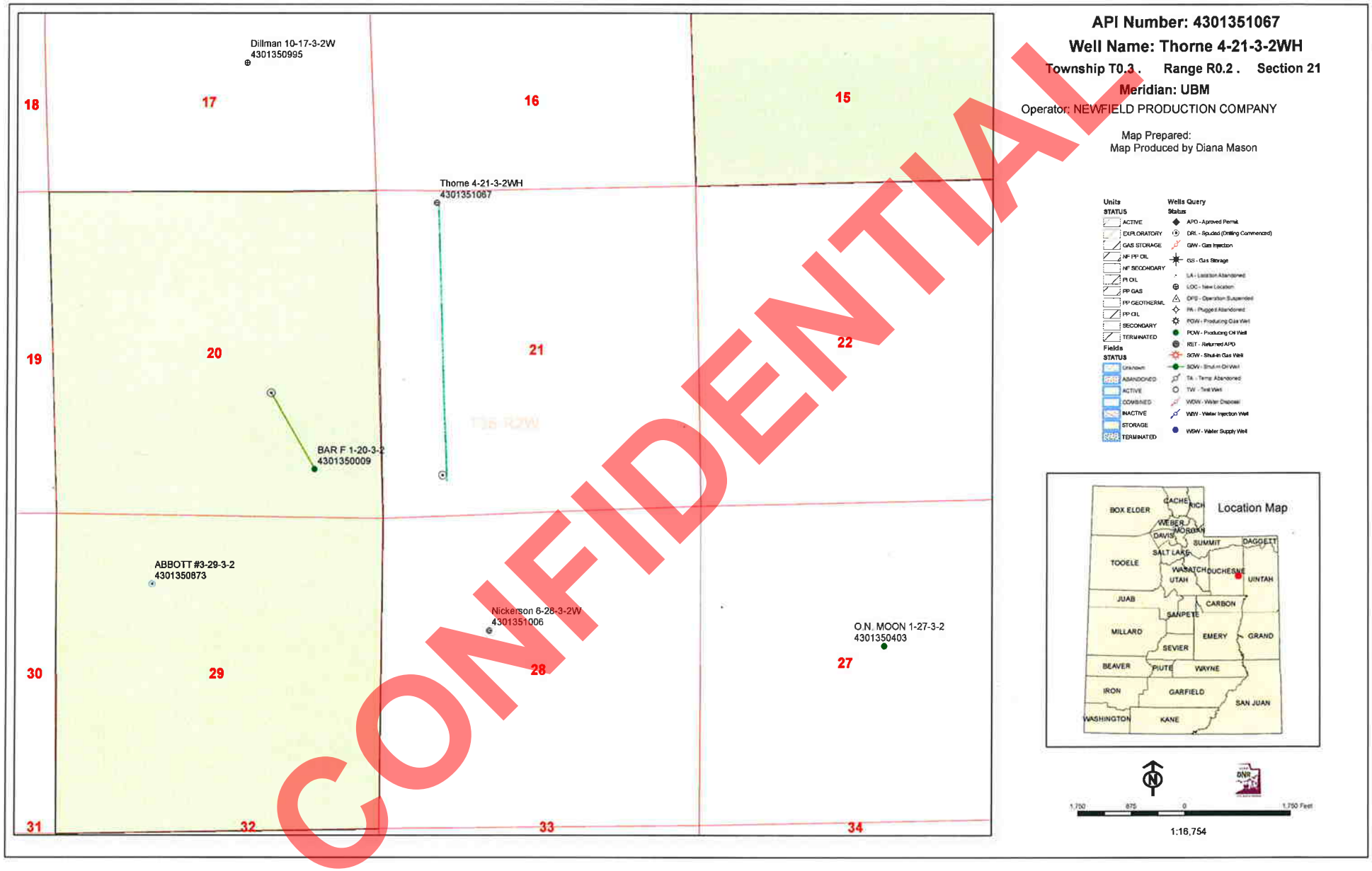
Pad Location: NWNW Section 21, T3S, R2W, U.S.B.&M.



SURVEYED BY: D.P.	DATE SURVEYED: 11-04-11	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: F.T.M.	DATE DRAWN: 11-07-11	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

RECEIVED: November 17, 2011

API Well Number: 43013510670000



API Well Number: 43013510670000

BOPE REVIEW NEWFIELD PRODUCTION COMPANY Thorne 4-21-3-2WH 43013510670000

Well Name	NEWFIELD PRODUCTION COMPANY Thorne 4-21-3-2WH 43			
String	COND	SURF	I1	PROD
Casing Size(")	14.000	9.625	7.000	4.500
Setting Depth (TVD)	60	2500	8342	7888
Previous Shoe Setting Depth (TVD)	0	60	2500	8342
Max Mud Weight (ppg)	8.3	8.3	10.5	10.5
BOPE Proposed (psi)	0	500	5000	5000
Casing Internal Yield (psi)	1000	3520	9950	12410
Operators Max Anticipated Pressure (psi)	4102			10.0

Calculations	COND String	14.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	26		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	19	NO	air and/or fresh water drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	13	NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	13	NO	
Required Casing/BOPE Test Pressure=		60	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi	*Assumes 1psi/ft frac gradient

Calculations	SURF String	9.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	1083		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	783	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	533	NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	546	NO	Reasonable depth, no expected pressures
Required Casing/BOPE Test Pressure=		2464	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		60	psi	*Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	4555		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3554	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2720	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3270	NO	Reasonable
Required Casing/BOPE Test Pressure=		5000	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi	*Assumes 1psi/ft frac gradient

Calculations	PROD String	4.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	4307		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3360	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2572	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4407	YES	
Required Casing/BOPE Test Pressure=		5000	psi	

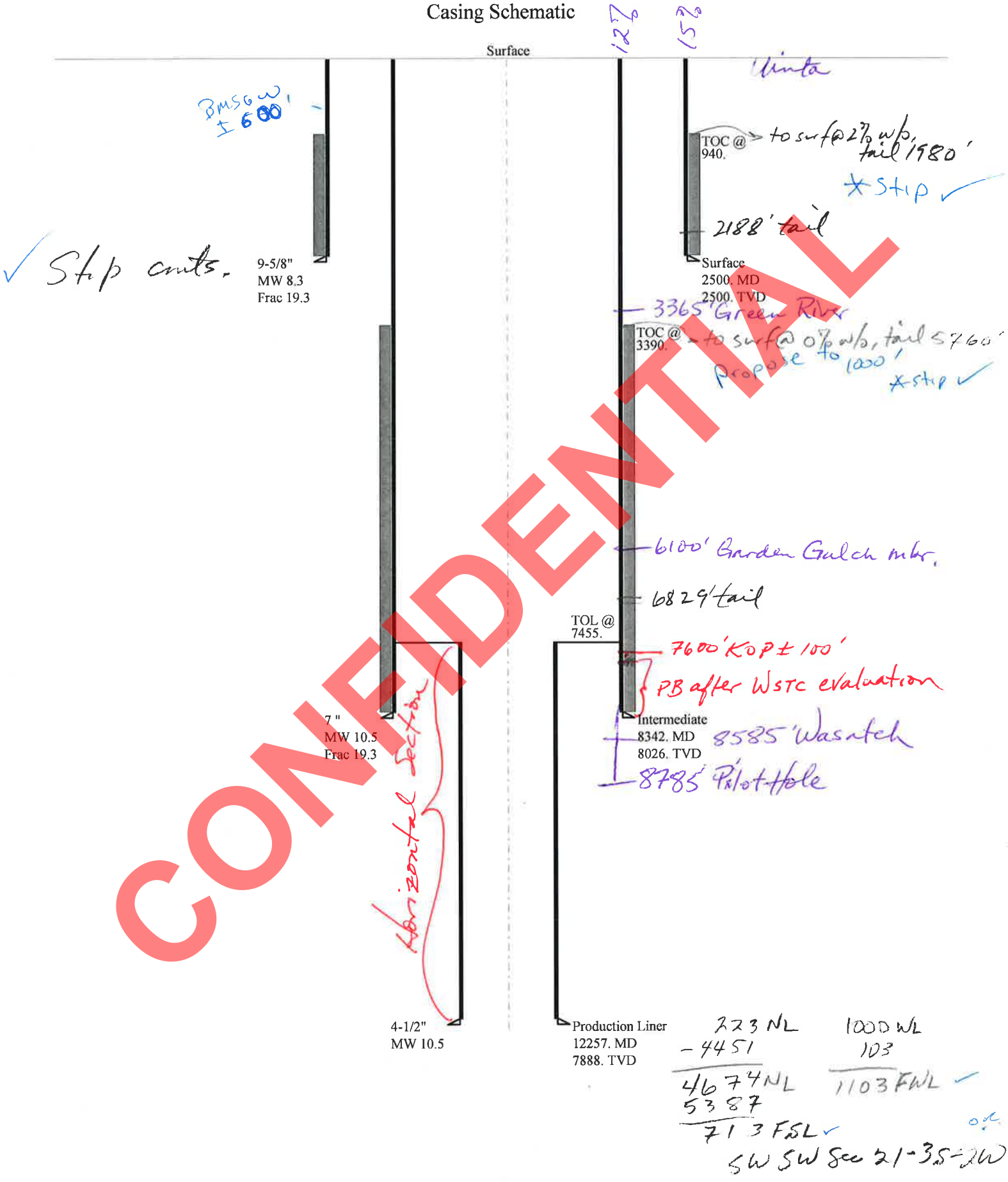
RECEIVED: December 19, 2011

***Max Pressure Allowed @ Previous Casing Shoe=**	8342	psi *Assumes 1psi/ft frac gradient

RECEIVED: December 19, 2011

43013510670000 Thorne 4-21-3-2WH

Casing Schematic



CONFIDENTIAL

Uinta

323 NL
- 4451
4674 NL
5387
713 FSL ✓

1000 WL
103
1103 FWL ✓

o.k.

SW SW Sec 21-3S-2W

Well name:	**43013510670000 Thorne 4-21-3-2WH**
Operator:	**NEWFIELD PRODUCTION COMPANY**
String type:	Surface
Project ID:	43-013-51067
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,200 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,500 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 2,192 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 109 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 940 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,026 ft
Next mud weight: 10.500 ppg
Next setting BHP: 4,378 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,500 ft
Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2500	9.625	36.00	J-55	ST&C	2500	2500	8.796	21730

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1082	2020	1.867	2500	3520	1.41	90	394	4.38 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: December 13,2011
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2500 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43013510670000 Thorne 4-21-3-2WH**
Operator:	**NEWFIELD PRODUCTION COMPANY**
String type:	Intermediate
Project ID:	43-013-51067
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 10.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,612 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,378 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 6,755 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 186 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 3,390 ft

Directional Info - Build & Hold
Kick-off point 7505 ft
Departure at shoe: 539 ft
Maximum dogleg: 11 °/100ft
Inclination at shoe: 92.02 °

Re subsequent strings:
Next setting depth: 7,888 ft
Next mud weight: 10.500 ppg
Next setting BHP: 4,303 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 8,342 ft
Injection pressure: 8,342 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	8342	7	26.00	P-110	Buttress	8026	8342	6.151	92771

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4378	6230	1.423	4378	9950	2.27	208.7	830.4	3.98 B

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: December 13,2011
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 8026 ft, a mud weight of 10.5 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43013510670000 Thorne 4-21-3-2WH**
Operator:	**NEWFIELD PRODUCTION COMPANY**
String type:	Production Liner
Project ID:	43-013-51067
Location:	DUCHESNE COUNTY

Design parameters:

Collapse
Mud weight: 10.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,567 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,303 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 7,855 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 184 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Liner top: 7,455 ft
Directional Info - Build & Hold
Kick-off point 7505 ft
Departure at shoe: 4452 ft
Maximum dogleg: 11 °/100ft
Inclination at shoe: 92.02 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	4757	4.5	13.50	P-110	Buttress	7888	12257	3.795	28539

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4303	10680	2.482	4333	12410	2.86	5.2	421.9	80.55 B

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: December 13,2011
Salt Lake City, Utah

Remarks:
For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 7888 ft, a mud weight of 10.5 ppg The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY
Well Name Thorne 4-21-3-2WH
API Number 43013510670000 **APD No** 4927 **Field/Unit** WILDCAT
Location: 1/4,1/4 NWNW **Sec** 21 **Tw** 3.0S **Rng** 2.0W 223 FNL 1008 FWL
GPS Coord (UTM) **Surface Owner** Dallas E. and Martha J. Murray

Participants

M. Jones, M. Reinbold, C. Jensen (UDOGM), T. Eaton, Z. McIntyre, Forest Bird, J. Henderson (Newfield), Dallas Murray (surface owner).

Regional/Local Setting & Topography

This location is proposed and staked northwest of Myton, Utah approximately 3 miles on property owned by Dallas Murray. The site is directly north of Mr. Murray's home a few hundred yards. The site is located in a low area just south of the county road. It is not the best site for a well however topography, the county road, Mr. Murry's home, and other restraints almost force us to utilize this site. It will work but will require creativity and extra dirt work to create a stable site that will allow runoff to flow around the pad.

Surface Use Plan

Current Surface Use
Agricultural

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	**Width** 300 **Length** 400	Onsite	

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands Y

This site is in the middle of a drainage area that sheet floods across the low spot directly where the location is proposed. Diversion is required. Build up location approximately 3 feet.

Flora / Fauna

grasses, brush, russian olive, cottonwood.

Soil Type and Characteristics

clay

Erosion Issues N

Sedimentation Issues N

Site Stability Issues Y

area will be wet, build up location with 3' of pit run material.

Drainage Diverson Required? Y

Divert drainages around and away from location and access road.

Berm Required? Y

Berm location to prevent fluids from entering or leaving the pad.

Erosion Sedimentation Control Required? N

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)		20	
Distance to Surface Water (feet)		20	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	Low permeability	0	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)	10 to 20	5	
Affected Populations	10 to 30	10 to 30	
Presence Nearby Utility Conduits	Present	15	
	Final Score	71	1 Sensitivity Level

Characteristics / Requirements

Dugout earthen pit (100 x 60 x 8). Reserve pit could get wet during construction.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** N

Other Observations / Comments

Mark Jones	12/7/2011
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
4927	43013510670000	LOCKED	OW	P	No

Operator	NEWFIELD PRODUCTION COMPANY	**Surface Owner-APD**	Dallas E. and Martha J. Murray
Well Name	Thorne 4-21-3-2WH	**Unit**	
Field	WILDCAT	**Type of Work**	DRILL
Location	NWNW 21 3S 2W U 223 FNL 1008 FWL GPS Coord (UTM) 574877E 4451888N		

Geologic Statement of Basis

Newfield proposes to set 60' of conductor and 2,500' of surface casing at this location. The base of the moderately saline water at this location is estimated to be at a depth of 650'. A search of Division of Water Rights records shows 10 water wells within a 10,000 foot radius of the center of Section 21. All wells are privately owned. Depth is listed as ranging from 40 to 100 feet. Average depth is approximately 50 feet. Water use is listed as irrigation, stock watering, and domestic use. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed surface casing should adequately protect useable ground water in this area.

Brad Hill — **APD Evaluator**

12/20/2011 — **Date / Time**

Surface Statement of Basis

This location is proposed and staked northwest of Myton, Utah approximately 3 miles on property owned by Dallas Murray. The site is directly north of Mr. Murray's home a few hundred yards. The site is located in a low area just south of the county road. It is not the best site for a well however topography, the county road, Mr. Murry's home, and other restraints almost force us to utilize this site. It will work but will require creativity and extra dirt work to create a stable site that will allow runoff to flow around the pad. The location should be bermed to prevent spills from leaving the confines of the pad. Fencing around the reserve pit will be necessary once the well is drilled to prevent wildlife and livestock from becoming a problem. Drainages should be diverted around and away from wellpad and access road. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. Dallas Murray was in attendance during the pre-site and indicated no concerns with the well pad. The well pad will be built up with approximately 3 feet of pit run material to stabize the site for well activities, to keep the location dryer during wet seasons and storm events, and to help divert runoff along the north and east sides of the well pad. Corner #6 will need to be rounded off some to create a diversion route for the runoff along the north to proceed east and south back into it's natural route.

Mark Jones — **Onsite Evaluator**

12/7/2011 — **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	Build the well pad up with approximately 3 feet of pit run material for stability issues and to help runoff diversion.
Surface	Round off corner #6 as needed to allow runoff to flow around this point.

RECEIVED: December 29, 2011

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/17/2011
API NO. ASSIGNED: 43013510670000
WELL NAME: Thorne 4-21-3-2WH
OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)
PHONE NUMBER: 435 719-2018
CONTACT: Don Hamilton

PROPOSED LOCATION: NWNW 21 030S 020W
Permit Tech Review: ☑

SURFACE: 0223 FNL 1008 FWL
Engineering Review: ☑

BOTTOM: 0670 FSL 1008 FWL
Geology Review: ☑

COUNTY: DUCHESNE
LATITUDE: 40.21406
LONGITUDE: -110.12005
UTM SURF EASTINGS: 574877.00
NORTHINGS: 4451888.00
FIELD NAME: WILDCAT
LEASE TYPE: 4 - Fee
LEASE NUMBER: Patented
PROPOSED PRODUCING FORMATION(S): GREEN RIVER
SURFACE OWNER: 4 - Fee
COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** STATE - B001834
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 437478
- ☑ **RDCC Review:** 2011-12-21 00:00:00.0
- ☑ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: R649-3-2.6
Effective Date:
Siting:

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed
TEMP 640 ACRE SPACING:

Stipulations:
5 - Statement of Basis - bhill
8 - Cement to Surface -- 2 strings - ddoucet
12 - Cement Volume (3) - ddoucet
21 - RDCC - dmason
23 - Spacing - dmason
26 - Temporary Spacing - dmason
27 - Other - bhill
28 - Other2 - bhill

RECEIVED: December 29, 2011

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: Thorne 4-21-3-2WH
API Well Number: 43013510670000
Lease Number: Patented
Surface Owner: FEE (PRIVATE)
Approval Date: 12/29/2011

Issued to:
NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2.6. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review. (See attached)

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

A temporary 640 acre spacing unit is hereby established in Section *, Township *, Range * for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

Cement volumes for the 9 5/8" casing string shall be determined from actual hole diameter in order to

place cement from the pipe setting depth back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 1000' MD as indicated in the submitted drilling plan.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:
- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
- Within 24 hours following the spudding of the well – contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:
- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation

- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# 29 Submitted By Mike Braithwaite Phone Number (435) 401-8392
Well Name/Number Thorne 4-21-3-2WH
Qtr/Qtr NWNW Section 21 Township 3S Range 2W
Lease Serial Number FEE
API Number 43-013510670000

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 1/3/2012 9:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 1/3/2011 3:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ _____ AM ☐ PM ☐

Remarks _____

CONFIDENTIAL

RECEIVED
JAN 18 2012
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: Thorne 4-21-3-2WH
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: UINTA CB - WASATCH DEEP
1. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER
8. WELL NAME and NUMBER: THORNE 4-21-3-2W H
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY
9. API NUMBER: 4301351067
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052
PHONE NUMBER: 435.646.3721
10. FIELD AND POOL, OR WILDCAT: UINTA CENTRAL BASIN
4. LOCATION OF WELL:
FOOTAGES AT SURFACE: 0493 FNL 1008 FWL
COUNTY:
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NWNW, 21, T3S, R2W
STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARITLY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLAIR
☒ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of Work Completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/STOP)	☐ WATER SHUT-OFF
01/06/2012	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☒ OTHER: - Spud Notice
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 1/3/12 MIRU Ross #29. Spud well @9:00 AM. Drill 80' of 18" hole with air mist. TIH W/ 2 Jt's 14" H-40 37# csgn. Set @ 80'. On 1/04/12 cement with 110 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 10 barrels cement to pit. WOC.

NAME (PLEASE PRINT) Branden Arnold TITLE

SIGNATURE B. Arnold DATE 01/06/2012

(This space for State use only)

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
ENTITY ACTION FORM -FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY
ADDRESS: RT. 3 BOX 3630
MYTON, UT 84052

OPERATOR ACCT. NO. N2695

C

ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	18391	4301350995	DILLMAN 10-17-3-2W	NWSE	17	3S	2W	DUCHESNE	1/3/2012	1/31/12
WELL 1 COMMENTS: WSTC										CONFIDENTIAL	
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	18392	4301351067	THORNE 4-21-3-2W WH	nwnw SWSW	21	3S	2W	DUCHESNE	1/3/2012	1/31/12
GRRV BHL: SWSW										CONFIDENTIAL	
ACTION B	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE
E	99999	18186	4304751411	RIO GRANDE 9-13-4-1W	NESE	13	4S	1W	UINTAH		9/27/11
CHANGE TO GR-WS FORMATION											1/25/12
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
E	99999	18183	4304751413	RIO GRANDE 14-13-4-1W	SESW	13	4S	1W	UINTAH		9/16/11
CHANGE TO GR-WS FORMATION											1/25/12
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE

ACTION CODES (See instructions on back of form)
- A - new entity for new well (single well only)
- B - well to existing entity (group or unit well)
- C - from one existing entity to another existing entity
- D - well from one existing entity to a new entity
- E - other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected

RECEIVED
JAN 19 2012
DIV. OF OIL, GAS & MINING

Signature: Jentri Park
Production Clerk
01/19/12

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
THORNE 4-21-3-2WH

2. NAME OF OPERATOR:
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:
43013510670000

3. ADDRESS OF OPERATOR:
1001 17th Street, Suite 2000 , Denver, CO, 80202

PHONE NUMBER:
303 382-4443 Ext

9. FIELD and POOL or WILDCAT:
NORTH MYTON BENCH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0223 FNL 1008 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 21 Township: 03.0S Range: 02.0W Meridian: U

COUNTY:
DUCHESNE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 10/1/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	✓ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER: Vent/Flare

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

During an anticipated 10 day period in the month of October 2012, Kinder Morgan will be unable to receive gas produced from 43 of Newfield Production Company's oil wells. In compliance with UDOGM requirements, Newfield is providing notification of short term venting/flaring for wells that may exceed 1,800 MCF/calendar month. Please see attached.---R649-3-20-4.2-----

Approved by the Utah Division of Oil, Gas and Mining

Date: September 25, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jill L Loyle	303 383-4135	Regulatory Technician
SIGNATURE		**DATE**
N/A		9/24/2012

RECEIVED: Sep. 24, 2012

NEWFIELD

September 21, 2012

Dustin Doucet
Petroleum Engineer
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84116

RE: Gas Venting or Flaring Notification per R649-3-20

Dear Mr. Doucet,

Newfield Production Company (Newfield) is submitting this notification to the Utah Division of Oil, Gas and Mining (UDOGM) regarding the necessary venting or flaring of oil wells in Newfield's Central Basin field.

Kinder Morgan Pipeline has notified Newfield of their intent to test portions of a pipeline system that services 43 of Newfield's oil wells. During an anticipated 10 day period in the month of October 2012, Kinder Morgan will be unable to receive gas produced from certain Newfield wells. Newfield has evaluated options for marketing this gas, however due to the short duration of this event it is not feasible to install the new pipelines necessary to sell the gas. Thus Newfield will be compelled to conduct unavoidable oil well gas venting or flaring during this pipeline service period.

In compliance with UDOGM requirements Newfield is hereby providing notification of short term venting/flaring for wells that may exceed 1,800 MCF/calendar month. Newfield has identified 7 wells that will potentially exceed the 1,800 MCF/calendar month threshold assuming a 10 day event. While 7 wells are expected to exceed the 1,800 MCF limitations, there are an additional 36 affected wells that have lower production rates not anticipated to exceed the 1,800 MCF notification threshold.

Newfield intends to flare (rather than vent) the produced gas where feasible in order to minimize impacts to the environment and provide for safe operational conditions. Newfield plans to reroute the gas through lateral pipelines to 4 separate central flaring sites. These flare locations are listed below.

At this time Newfield is proposing the following flare locations based on lateral pipeline connections and surrounding landscape safety:

1. Evans 14-25-3-3
2. State 11-5-3-1
3. Ute 7-19-3-3
4. Mullins 11-14-3-2

The final location and application of flares may change as KM provides additional information concerning the event.

Enclosed please find sundry notices for the seven wells anticipated to exceed the 1,800 MCF threshold and supporting documentation including a list of wells impacted by the Kinder Morgan pipeline shutdown and total anticipated produced gas that will be flared or vented. If you have any questions or require additional information, please contact me at (303) 893-0102 or at reales@newfield.com.

Sincerely,

Robert Eales
HSE Analyst

ec: Tim Mullen, Eric Bengtson, Rick Opat, Don Bromley and Douglas Henderer

Newfield Affected Wells by Kinder Morgan Pipeline Shutdown

Well	API Number	Average Daily Gas Production (mcf/day)	Anticipated 10 Day Total (MCF)	Flare Group/Site
DART 1-12-3-2	43-013-50418	13.28	132.80	State 11-5-3-1W
EMERALD PHNX 15-31-2-1W	43-013-51290	141.51	1415.10	State 11-5-3-1W
LAMB 1-19-3-1W	43-013-50425	150.88	1508.80	State 11-5-3-1W
LAMB 14-13-3-2	43-013-50849	13.98	139.80	State 11-5-3-1W
LAMB 9-24-3-2	43-013-50923	30.46	304.60	State 11-5-3-1W
STATE 11-5-3-1W	43-013-51043	55.62	556.20	State 11-5-3-1W
TOMLIN 7-1-3-2W	43-013-51081	47.62	476.20	State 11-5-3-1W
WHITE 7-6-3-1W	43-013-50813	28.64	286.40	State 11-5-3-1W
YERGENSEN 1-18-3-1W	43-013-50428	79.81	798.10	State 11-5-3-1W
YERGENSEN 7-7-3-1W	43-013-50985	30.40	304.00	State 11-5-3-1W
ABBOTT 3-29-3-2W	43-013-50873	24.35	243.50	Evans 14-25-3-3
BAR F 1-20-3-2	43-013-50009	52.98	529.80	Evans 14-25-3-3
CONNOLLY 10-24-3-3W	43-013-51145	134.92	1349.20	Evans 14-25-3-3
EVANS 14-25-3-3W	43-013-51177	34.31	343.10	Evans 14-25-3-3
GILES 1-19-3-2	43-013-50426	93.45	934.50	Evans 14-25-3-3
LAKE BOREHAM 4-36-3-3WH	43-013-51194	718.03	7180.30	Evans 14-25-3-3
LARSEN 2-29-3-2WH	43-013-51224	541.03	5410.30	Evans 14-25-3-3
LH TRUST 3A-30-3-2W	43-013-50901	93.38	933.80	Evans 14-25-3-3
MURPHY 2-31-3-2W	43-013-50833	26.68	266.80	Evans 14-25-3-3
SULSER 10-30-3-2W	43-013-51387	135.96	1359.60	Evans 14-25-3-3
State 4-19-3-2	43-013-51130	160.00	1600.00	Evans 14-25-3-3
ODEKIRK 11-12-3-3W	43-013-51054	271.69	2716.90	Mullins 11-14-3-2
THORNE 4-21-3-2WH	43-013-51067	454.96	4549.60	Mullins 11-14-3-2
LUSTY 14-2-3-3W	43-013-51370	171.30	1713.00	Mullins 11-14-3-2
PADILLA 1-18-3-2W	43-013-50786	87.82	878.20	Mullins 11-14-3-2
DILLMAN 10-17-3-2W	43-013-50995	134.48	1344.80	Mullins 11-14-3-2
MILES 15-8-3-2W	43-013-50814	268.20	2682.00	Mullins 11-14-3-2
MULLINS 11-14-3-2W	43-013-51044	117.70	1177.00	Mullins 11-14-3-2
GDR Brothers 7-2-3-2W	43-013-50954	100.00	1000.00	Mullins 11-14-3-2
NICKERSON 6-28-3-2W	43-013-51006	69.10	691.00	Mullins 11-14-3-2
DILLMAN 5-2-3-1W	43-047-52244	57.80	578.00	Mullins 11-14-3-2
ALZADA 11-21-3-2W	43-013-51068	94.03	940.30	Mullins 11-14-3-2
CONRAD 6-17-3-1	43-013-50857	45.20	452.00	Mullins 11-14-3-2
LAMB 12-20-3-1W	43-013-50858	41.20	412.00	Mullins 11-14-3-2
SMALLEY 7-8-3-1W	43-013-50822	45.11	451.10	Mullins 11-14-3-2
YERGENSEN 1-9-3-1	43-013-50427	33.50	335.00	Mullins 11-14-3-2
KILLIAN 14-3-3-1W	43-013-50945	52.70	527.00	Mullins 11-14-3-2
STATE 6-4-3-1W	43-013-50691	36.93	369.30	Mullins 11-14-3-2
KETTLE 1-10-3-1	43-013-50396	109.78	1097.80	Mullins 11-14-3-2
EVANS 1-4-3-3	43-013-50561	28.71	287.10	Ute 7-19-3-3
GILBERT 9-9-3-3W	43-013-50955	246.98	2469.80	Ute 7-19-3-3
GRACE 3-16-3-3WH	43-013-51185	149.26	1492.60	Ute 7-19-3-3
McKenna 1-17-3-3WH	43-013-51122	600.00	6000.00	Ute 7-19-3-3
		Total	58,237	

RECEIVED: Sep. 24, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
THORNE 4-21-3-2WH

2. NAME OF OPERATOR:
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:
43013510670000

3. ADDRESS OF OPERATOR:
1001 17th Street, Suite 2000 , Denver, CO, 80202

PHONE NUMBER:
303 382-4443 Ext

9. FIELD and POOL or WILDCAT:
NORTH MYTON BENCH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0223 FNL 1008 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 21 Township: 03.0S Range: 02.0W Meridian: U

COUNTY:
DUCHESNE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 6/1/2012	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Site Facility/Site Security

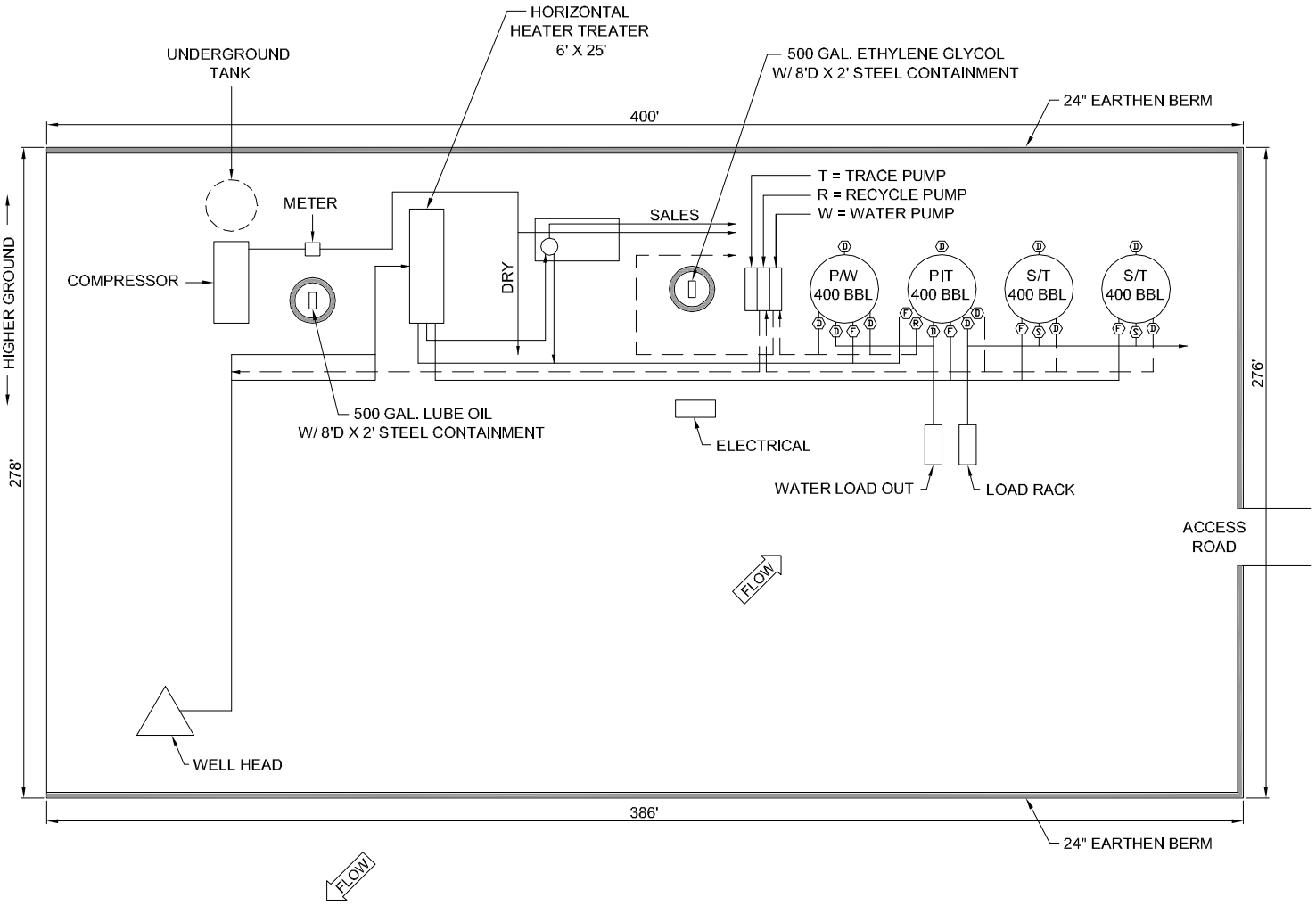
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

SEE ATTACHED REVISED SITE FACILITY DIAGRAM

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
October 11, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jill L Loyle	303 383-4135	Regulatory Technician
SIGNATURE		**DATE**
N/A		10/8/2012

RECEIVED: Oct. 08, 2012



UTU87538X

POSITION OF VALVES AND USE OF SEALS DURING PRODUCTION

Valve	Line Purpose	Position	Seal Installed
D	Drain	Closed	Yes
F	Oil, Gas, Water	Open	No
O	Overflow	Open/Closed	No
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Open/Closed	No
S	Sales	Closed	Yes

Valve Type
D - Drain Valve
F - Flow Valve
O - Overflow
V - Vent
R - Recycle
B - Blow Down
S - Sales Valve

Federal Lease #:
API #: 4301351067

This lease is subject to the Site Security Plan for:
Newfield Exploration Company
19 East Pine Street
Pinedale, WY 82941

POSITION OF VALVES AND USE OF SEALS DURING SALES

Valve	Line Purpose	Position	Seal Installed
D	Drain	Closed	Yes
F	Oil, Gas, Water	Closed	Yes
O	Overflow	Closed	Yes
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Closed	No
S	Sales	Open	No

POSITION OF VALVES AND USE OF SEALS DURING WATER DRAIN

Valve	Line Purpose	Position	Seal Installed
D	Drain	Open	No
F	Oil, Gas, Water	Closed	No
O	Overflow	Closed	No
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Closed	No
S	Sales	Closed	Yes

THORNE 4-21-3-2WH

Newfield Exploration Company
NWNW Sec 21, T3S, R2W
Duchesne County, UT

M.G. | JULY 2012

KLEINFELDER
Bright People. Right Solutions.

Note: This drawing represents approximate sizes and distances. Underground pipeline locations are also approximated.

RECEIVED: Oct. 08, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
THORNE 4-21-3-2WH

2. NAME OF OPERATOR:
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:
43013510670000

3. ADDRESS OF OPERATOR:
Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER:
435 646-4825 Ext

9. FIELD and POOL or WILDCAT:
NORTH MYTON BENCH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0223 FNL 1008 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNW Section: 21 Township: 03.0S Range: 02.0W Meridian: U

COUNTY:
DUCHESNE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 5/27/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above well was placed on production on 05/27/2012 at 04:30 hours. Production Start Sundry re-sent 10/05/2012.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
October 12, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Kaci Deveraux	435 646-4867	Production Technician
SIGNATURE		**DATE**
N/A		10/5/2012

RECEIVED: Oct. 05, 2012

Sundry Number: 30756 API Well Number: 43013510670000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: Oil Well

8. WELL NAME and NUMBER: THORNE 4-21-3-2WH

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43013510670000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: NORTH MYTON BENCH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0223 FNL 1008 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 21 Township: 03.0S Range: 02.0W Meridian: U

COUNTY: DUCHESNE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 5/27/2012	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above well was placed on production on 05/27/2012 at 04:30 hours. Production Start Sundry re-sent 10/05/2012.

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Kaci Deveraux	435 646-4867	Production Technician
SIGNATURE N/A		**DATE** 10/5/2012

RECEIVED: Oct. 05, 2012

Daily Activity Report

Format For Sundry

THORNE 4-21-3-2W

3/1/2012 To 7/30/2012

3/1/2012 Day: 2 **Completion**

WWS #5 on 3/1/2012 - PU tbg. Retreive RBP. LD tbg. - RESENT TO CORRECT COST CODES - Held safety meeting. Open well w/ 0 psi on casing. RU Baker retreiving head, Pickup of racks 1 jt 2-3/8" PH6 tbg, X nipple, 159 jts tbg. Tag 2' high. Circulate down to RBP @ 4999'. Release RBP. TOOH w/ tbg LD on racks. Take pipe rams out of BOP's & relace w/ 4 1/2" pipe rams. SIFN.
Daily Cost: $0
Cumulative Cost: $37,647

3/2/2012 Day: 3 **Completion**

WWS #5 on 3/2/2012 - Test BOP's. CBL well. TIH w/ csg. - Safety meeting. Instal tbg hanger. Pressure Test BOP's. RU lubricator. Test lubricator. CBL well w/ 0 psi from 7800' to surface. Cement top @ 600'. RD WLT. RU 4-1/2" Haliburton seal assembly. Unload 4-1/2" Butrees csg. Drift, Tally & pickup RIH w/ 15 jts casing. SIFN.
Daily Cost: $0
Cumulative Cost: $57,872

3/3/2012 Day: 4 **Completion**

WWS #5 on 3/3/2012 - RIH w/ casing. RD 7-1/16 well head. Instal 4-1/16 10K manual valve. - Open well w/ 0 psi. Held safety meeting. Continue TIH w/ 4-1/2" casing. Circulate well @ 7615' w/300 bbls Biocide wtr. TIH w/ 1 jt to sting into hanger @ 7642'. Halibuton stinger, 159 jts 4-1/2", P-110, 13.5#, BTC, Space out casing w/ 8', 8', 6', 6', 4' pup joints, 1 jt 4-1/2" P-110. Hang casing on well head w/ 45,000# compression. Chart annular test to 200/300 psi 3000 psi for 10 min good test. RD 10K 7-1/16 well head. Instal Cameron adapter flange. Instal 10K 4-1/16 manual valve. SIFN.
Daily Cost: $0
Cumulative Cost: $84,892

3/4/2012 Day: 5 **Completion**

WWS #5 on 3/4/2012 - Test wellhead. Set WRP. Test casing. - Held safety meeting. Open well w/ 0 psi on well. Instal TWCV in hanger. Test void in hanger to 10,000 psi. Test valves to 10,000 psi. RIH w/ 3.75" gauge ring to 7800'. RIH w/ WRP 4-1/2". Set @ 7745'. Test 4-1/2" to 4300 psi for 30 min. Test 4-1/2" casing to 9900 psi for 30 min. Hold 3250 on annulus. Ran chart on tests. SIFN.
Daily Cost: $0
Cumulative Cost: $108,400

3/5/2012 Day: 6 **Completion**

WWS #5 on 3/5/2012 - Retrieve WRP. Rolled rubber off pkr. - Held safety meeting & reviewed JSA for WL. Open well w/ 0 psi on casing. RIH w/ Bridge plug Retrieving tool, Mechanical 1-1/2" Jars, 1-1/2" Hydraulic Jars, Collar Locator, 3-1/8" weight bars, 2-3/4" weight bars. Tag

fill @ 7720'. Work down to 7732'. Latch onto pkr. Set Jars off for 20 minutes. Run Out hole (hanging up in collars). 5294' had to Jar threw csg collar (next 2 also). Came free. LD WRP w/ missing 1 of 3 packing rubbers (3.75" x 1" x 5/8" thick). RIH w/ Spear 4' long w/ spurs on it. Stopped @ 6000' & worked up & down. Stopped again @ 7300' Worked up & down. Went to 7700' & came out, slow due to drag w/ 4-3/4" collars on tools. No sign of rubbers or trash in well. SIFN.
Daily Cost: $0
Cumulative Cost: $124,386

3/7/2012 Day: 7 **Completion**

WWS #5 on 3/7/2012 - RIH w/ W/L attp. To fish RBP ele. - Kelly up on jt. # 257 @ 8022' & circ. Dwn. In singles w/ pump rate @ 2 bpm & pres. @ 1600# working string dwn to top sleeve @ 8902' bringing rates f/ 2 bpm to 2.8 bpm seeing pres. Change w/ rate, 3300# max pres. Staying cons. @ 1600# w/ 2 bpm (note: kicked pumps out before tagging sleeve) made mark 4' above then cont. to work rate & tbg. String f/ 8898' to 8836' - Hold pre job saftey meeting R/U perforators W/L 0# SIP, pres. Test lub. To 4500# (chart test good) P/U RIH w/ 4 star brillow spear RIH to 8000' w/ no restrictions @ 150' pre min. work W/L f/ 8000' to 7800' several times not seeing any signs of fish POOH @ 100' per min. work tool f/ 5900' to 5400' twice (note: pos. lost fish btw. Those depths prev. day) cont. OOH L/D fishing tool not seeing any signs of element R/D W/L - Crew shut dwn for lunch. - Cont. in hole w/ 187 jts. EOT @ 8022' fill tbg.w/ 18 bbls break circ. Pump 2 bpm @ 1600# est. motor is working shut pump dwn. - Cont. in hole w/ 187 jts. EOT @ 8022' fill tbg.w/ 18 bbls break circ. Pump 2 bpm @ 1600# est. motor is working shut pump dwn. - Rig shut dwn for break - Rig shut dwn for break - Make up Venturi tool , mud motor & 3.625 OD w/ 2.2 ID mill followed by 70 jnts. 5.7# 2 3/8 tbg. Fill & test tool @ 2220' pres. @ 900# w/ 2 bpm. - Make up Venturi tool , mud motor & 3.625 OD w/ 2.2 ID mill followed by 70 jnts. 5.7# 2 3/8 tbg. Fill & test tool @ 2220' pres. @ 900# w/ 2 bpm. - N/U 4 1/16" 10k BOP, use dry rod to pull double check valve 0# on well R/U 4 Star pres. Test all comp. of stack ~200-300# for low & 4500# for high (charted all) - N/U 4 1/16" 10k BOP, use dry rod to pull double check valve 0# on well R/U 4 Star pres. Test all comp. of stack ~200-300# for low & 4500# for high (charted all) - Install double check valve in 4 1/2 hngr. Close 4 1/16" frac valve leave well SIFN. Drain up pump lines SNFN. - Install double check valve in 4 1/2 hngr. Close 4 1/16" frac valve leave well SIFN. Drain up pump lines SNFN. - Wait on orders, R/D rig floor N/D 4 1/16 10k manual frac valve & flow cross - Wait on orders, R/D rig floor N/D 4 1/16 10k manual frac valve & flow cross - Hold pre job saftey meeting R/U perforators W/L 0# SIP, pres. Test lub. To 4500# (chart test good) P/U RIH w/ 4 star brillow spear RIH to 8000' w/ no restrictions @ 150' pre min. work W/L f/ 8000' to 7800' several times not seeing any signs of fish POOH @ 100' per min. work tool f/ 5900' to 5400' twice (note: pos. lost fish btw. Those depths prev. day) cont. OOH L/D fishing tool not seeing any signs of element R/D W/L - Kelly up on jt. # 257 @ 8022' & circ. Dwn. In singles w/ pump rate @ 2 bpm & pres. @ 1600# working string dwn to top sleeve @ 8902' bringing rates f/ 2 bpm to 2.8 bpm seeing pres. Change w/ rate, 3300# max pres. Staying cons. @ 1600# w/ 2 bpm (note: kicked pumps out before tagging sleeve) made mark 4' above then cont. to work rate & tbg. String f/ 8898' to 8836'
Daily Cost: $0
Cumulative Cost: $138,105

3/8/2012 Day: 9 **Completion**

WWS #5 on 3/8/2012 - POOH w/ tbg. & BHA small amounts of rubber material found still leaving majority of fish in hole, wait on tools P/U RIH w/ mill (larger ID) & BHA - POOH w/ tbg. & BHA - P/U RIH w/ 3.63 OD x 2.5 ID burn shoe, jet junk basket, 2 rotary sub, circ sub rupture disc, hyd. Disconnect, back pres. Valve & rotary sub followed by 257 jts. Tbg. EOT @ 8011 kelly fill tbg. w/ 24 bbls tbg. String pres. Up worked pres. f/ 0# to 3000# while working

tbg. String w/ no luck un-blocking obstruction. - RIH w/2-3/8 tbg and w/fishing BHA and Cir hole @ 2.8 bbl/min @ 3300 psi . Tag sleeve PU 4ft Cir hole, work tbg up and down for 1 hr. slow pump down 2 bbl/min@1600 psi and cir hole. - POOH w/286 jts 2-3/8 w/3.13 x 1.75 Rotary sub, 2.88x 1.41 Dual back pressure valve,2.88 x 2.24 Hydraulic Disconnect, 2.88 x .60 dual circulating sub w/rupture disc, 2.88 x 13.18 Titan supermax motor w/Conventional power section,2.88 x 6.20 Venturi jet junk Basket w/4' Junk Housing, 3.63 x 1.75 Venturi bottom burn shoe. Recover small part material and rubber out of TTS Junk basket. SWI. - Shut down waiting on more fishing tools from TTS tools
Daily Cost: $0
Cumulative Cost: $185,326

3/9/2012 Day: 10 **Completion**

WWS #5 on 3/9/2012 - RIH w/ tbg. & Venturi tool fishing tool circ. Dwn. To 1st zone select sleeve, POOH L/D tools w/ fish - RIH w/284 jts. of tbg. Open ended out of derrick POOH w/ tbg. Laying dwn. - L/D Venturi tool recovering what appeared to be 100% of RBP packing element, drain up rig pump to ensure it didn¿t freeze over cold morning. - Cont. OOH w/ tbg. & Venturi tool & BHA C/O BHA which apeared to be packed w/ fine scale like matieral, M/U clean BHA W/O back pres. Valve - RIH w/ tbg. & BHA stopping every 1200'~ and breaking circ. To ensure same prob. Does not accure. Run 40 jts. Att. To get pump rate & pres. Tbg. Was plugged off again pres. Up to 1000# shut dwn. Reverse circ. Tbg. Vol. pump dwn tbg. Again est. rate of 3 bpm @ 1600# - Cont. in hole w/ 40 jts. Putting EOT @ 2550' broke circ. Cont. in w/ 40 jts. EOT @ 3752' . Cont. in w/ 40 jts. EOT @ 4993' broke circ. Had some color so circulated 20 min. Cont. in w/ 40 jts. EOT @ 6240' broke circ. Cont. TIH w/ 40 jts. EOT @ 7494'. Broke circ. TIH w/ 40 jts. EOT @ 6240'. Broke circ. TIH w/ 16 jts tbg. EOT @ 7980'. Broke circ. TIH w/ 1 std. EOT @ 8042'. Broke circ. Std down. Circulate each std down till reaching Sleeve @ 8902'. Touched sleeve while circulating. Came up & circulated. Started raising and lowering pump rate. Working tbg up & down (not touching sleeve). Circulated 1-1/2 time volume @ 3 to 3-3/4 bpm @ 3300 psi. TOOH w/ tbg circulating 1 jt @ a time. 8011' circulate well volume. TOOH w/ tbg.
Daily Cost: $0
Cumulative Cost: $208,630

3/10/2012 Day: 11 **Completion**

WWS #5 on 3/10/2012 - LD tbg. Prep well for frac crew. RU frac tree. Test tree. RU Flow back equipment. - LD 2-3/8" PH6 tbg. RDMOSU. Load out tbg. Haul in rock & smooth location. - RU frac tree. Test tree. RU flow back equipment.
Daily Cost: $0
Cumulative Cost: $256,000

3/11/2012 Day: 12 **Completion**

WWS #5 on 3/11/2012 - Open hydrlc vlv. Slid sleeve. Do DFIT. RU & test flowback. - Open well w/ 0 psi. RU Baker Hughes Cement pump. Held safety meeting & discussed JSA. RU pressure recorder. Drop ball (1.235" OD). Wait 1 hour. While RU Baker Hughes. Test lines. Pumped 17 bbls @ 4 bpm to get pressure to 4676 psi. Pump 86 bbls w/ Alpha 452 & Claycare chemicals. Pressured to 7000 psi. RU to casing. Held 3000 psi while took work string to 8400 psi to slide sleeve. Pressure dropped to 4320 psi. Pumped 15 bbls @ 2.3 bpm @ 4320 psi. Pumped 15 bbls of CaC12 @ 2.3 bpm @ 4294 psi. ISIP was 3989. Pumped 117 bbls ttl fluid. RD Baker Hughes & leave pressure recorder on well. - RU rest of flow back equipment. Test flow back.
Daily Cost: $0

Cumulative Cost: $282,429

3/12/2012 Day: 13 **Completion**

WWS #5 on 3/12/2012 - RU frac crew. - RU Baker Hughes frac equipment. RD DFIT recorder & 1:44 PM w/ 2900 psi on well.
Daily Cost: $0
Cumulative Cost: $291,629

3/13/2012 Day: 14 **Completion**

WWS #5 on 3/13/2012 - RU Baker Hughes. Over pressure HCR ground valve. Replace valve & pump. Test lines. - RU Baker Hughes frac crew. RU flow back equipment. Test lines. Wait on HCR valve (over pressured in test). RU Weatherford test unit. Re-pack 10k manual valve on well head (stem packing). Test lines.
Daily Cost: $0
Cumulative Cost: $305,849

3/14/2012 Day: 15 **Completion**

WWS #5 on 3/14/2012 - Frac stages as stimulation report. - Start dwn hole w/ stg. 13 screened out on stg. 20 of procedure open to flowback w/ 5200# on 16 choke recovered 200 bbls SWI att. To pump into again unable - Baker hughes change out ground Weatherford serviced frac tree & ground , drop ball for 13th sleeve retest lines & stack - Flow well back. Open on # 10 choke @ 4000# flowing back @ 8bpm recovering 480 bbls (recoverd 2.33 OD ball to shift 13th zone select sleeve) SWI - Frac well as procedure w/ Baker Hughes. See stimulation report. Held 3250 psi on casing annulus during frac. Screened out stage #12 w/ 37 bbls left in flush w/ 1# 30/50 on perfs. - open well back open to flowback for 60 min. recovering 380 bbls - Start pumping Slick Wtr. To clean wellbore unable discovered leak in bleed off shut dwn to replace. - Flow for 40 min. recovering 160 bbls started seeing gas at sur. SWI wait on dis. - test lines start dwn hole pump add. 2400 100 mesh & 9200 30/50 - Drop ball for stg. 14 frac as detailed screened out w/ in stg. 18 w/ ~27600 sand behind csg. Open to flowback
Daily Cost: $0
Cumulative Cost: $834,899

3/15/2012 Day: 16 **Completion**

WWS #5 on 3/15/2012 - Frac stages 14 thru 20. - SWIFN, clean up pickle frac lines seend frac crew home will R/D in the AM - Continue to frac stage 14 thru 19 according to stimulation report. - - Drop ball for stg. 20 pump dwn @ rate of 1-2 bpm & pres. @ 7000#-9000# seat ball frac stg. 20 as detailed
Daily Cost: $0
Cumulative Cost: $1,128,727

3/16/2012 Day: 17 **Completion**

WWS #5 on 3/16/2012 - RD BH crew. RU WLT. Lubricator would not pass pressure test. - In testing lubricator to 10K line in lubricator was stuck. Lost 200 psi in 5 min test. RD lubricator and repair rubbers. Instal different lubricator and rehead WL (there was no damage to line but rehead as precaution). SIFN. - RD Baker Hughes frac crew. - MIRUSU. RU Perforators LLC WLT

& 10k lubricator. RIH w/ Bull Plug (w/ 10- .5" holes), 2-3/8" x 4', J-55 pup jt (w/ 100- .5" holes), Ceramic disc 10K facing down, 2- 3/8" x 4' pup joint, XN nipple, 2- 3/8" x 4' pup jt, 4.5" WFD Arrow Set ASIX 10K pkr w/ XN nipple on top, 4.5" x 2-3/8" T@ on/off tool stinger. WL Setting tool, 2- 1-11/16 weight bars, collar locator. RU Weatherford test unit.
Daily Cost: $0
Cumulative Cost: $1,231,114

3/17/2012 Day: 18 **Completion**

Stone #8 on 3/17/2012 - RU WLT & lubricator. Test lubricator to 10K w/ Weatherford tester. RIH w/ gauge ring to 8405'. LD gg rng. RU ArrowSet ASIX pkr. Test Lub to 10K. RIH & set @ 8295'. Csg clr @ 8304'. RD WLT. Repair rig pad. MIRU. RD 4-1/16" 10K WH. Torque 7-1/16" 10K. - Well shut in for the night. No activities. - Pressure test gate valve, blind rams & one outter valve on mud cross to 250 low for 5 minjutes & 9800 psi for 10 minutes. SWI SDFN - Held safety meeting & dicussed JSA. RU Perforators WLT, crane & lubricator. Torque well head. PU 4-3/4" X 8' gauge ring w/ trash basket, 3-1/8" x 9.5' weight bar, 2-3/4' X 2.5" collar locator, 2-3/4" x 5' weight bar, 2-3/4" x 5' weight bar. Test lubricator to 10,000 psi for 5 min. RIH w/ gauge ring to 8385'. - Try spot rig in (mud hole). Clean mud from location. Haul in dirt to build pad for rig. MIRUSU. RD Wellhead (4-1/16" 10k). - PU 2-3/8" bull plug w/ 10 holes, 2-3/8" x 4' pup jt w/ 100 .5" holes Ceramic burst disc sub w/ 10k disk facing down, 2-3/8" x 4' J-55 pup jt, XN profile nipple, 2-3/8" x 4' pup jt, 4.5" WFD ArrowSet 10K pkr w/ X profile nipple, 4.5" x 2-3/8" T2 on/off tool stinger. Set CE @ 8295' w/ slow burn charge. EOT @ 8313'. SHUT IN WELL PRESSURE: 3600 PSI. - NU10K master valve, 10K double gate BOP w/ lower blind rams & upper 4 1/2" pipe rams, 10K single gate BOP w/ 4 1/2" rams, cross over from 10K to 5K flange, 5K annular preventor. Tighten & torque w/ Weatherford.
Daily Cost: $0
Cumulative Cost: $1,267,150

3/18/2012 Day: 19 **Completion**

Stone #8 on 3/18/2012 - PT 10K BOP stack, Sting out of Liner top, LD 4 1/2" frac string. - RD & release casers. Close & lock blind rams. Close master valve. Secure well & location. SDFN. - Unseat 4 1/2" casing hanger. POOH laying down 4 1/2" frac string. Haul 4 1/2" frac string to pipe yard. - Well shut in. No activities. - RU rig pump & lines, floor, stairs & tie back to single fast line. Pressure test TIW valves 250 psi low for 5 minutes & 9800 psi high for 10 minutes w/ Weatherford. Chart pressure test. - RU Weatherford casing crew and hydralic catwalk. Weatherford tester: pressure test 10K BOP 4 1/2" pipe rams, mud cross gate valves to 250 low for 5 minutes & 9800 psi high for 10 minutes. Pressure test 5K annular preventor to 250 psi low for 5 minutes & 4800 psi for 10 minutes. Chart all pressure tests. Release pressure. RD & release tester.
Daily Cost: $0
Cumulative Cost: $1,324,791

3/19/2012 Day: 20 **Completion**

Stone #8 on 3/19/2012 - Change & presssure test 2 3/8" & 2 7/8" tubing rams. PU & RIH w/ production tubing - Well shut in for the night. No activities. - Install & close, TIW valve. Close & lock upper & lower 2 7/8" pipe rams. Secure well, rig & location. SDFN. - Well shut in for the night. No activities. - Remove blind rams & 4 1/2" pipe rams from BOP stack. RU power tongs, change slips & elevators to 2 3/8". Install tubing hanger & two way check valve. Install 2 7/8" pipe rams test mandril in lower pipe rams & close rams. Pressure test lower 2 7/8' & 2 3/8" rams to 250 psi low for 5 minutes each & 8500 psi high for 10 minutes. Good test. Release pressure. - Start & warmup equipment. Safety meeting. Discuss: PPE, fall arrests in manlift,

emergency muster point, smoking area & days operation. Check & function equipment - PU Weatherford On/Off tool, X-nipple, 21 jts - 2 3/8", L80, 4.7#, EUE, 8rd, New tubing. crossover to 2 7/8", L80, 6.5#, EUE, 8rd, New tubing & RIH to top of liner.
Daily Cost: $0
Cumulative Cost: $1,381,313

3/20/2012 Day: 21 **Completion**

Stone #8 on 3/20/2012 - PU 2 7/8" tubing. Tag production packer & space out w/ subs. Roll hole w/ packer fluid. Latch onto packer. Land tubing w/ 15K compression. NDBOP stack. Install production tree & test seal to 250 psi low for 5 minutes & 10,000 psi high for 10 minutes. - Open well to flowback on 10/64" choke as per procedure. Opening pressure 3100 psi. - Spot and RU hot oiler. Load flowback low pressure lines. Pressure test to 1000 psi for 10 minutes. Release pressure. Load vessel with 200 degree water. - Wait on hot oiler to heat water & load flowback equipment. - Load flowback line from production tree to choke manifold. Pressure test choke manifold and high pressure flow side to 250 psi low for 5 minutes & 9700 psi high for 10 minutes. Chart test and entered into well file. - Pump out ceramic disc w/ 4200psi. Pump additional 5 bbls after disc broken. Well stabilized @ 3300 psi. Continue to RU flowback equipment. Stone rig #8 released @ 17:00 on 3/20/2012. - Lower derrick. RDMOSU. Rod out TWCV. RU flowback & production lines to production tree. - Well shut in for the night. No activities. - RD rig tongs, stairs & floor. NDBOP stack & associated equipment. - Latch onto packer. Pull test to insure proper latch. Land tubing w/ 18K in compression. Run in & tighten tubing hanger lockdown pins. Laydown landing joint. - Pump 300 bbls of packer fluid to clean & fill tubing annulas. - Continue to PU 2 7/8" production tubing. Tag Packer @ 8292'. Space out w/ 2'- 2 7/8" pup joint. PACKER ELIMENT SET @ 8295'. - Start & warmup equipment. Safety meeting with all personnel on location. Discuss: PPE, pinch points, FR policy, assembly point, overhead loads & high pressure testing. Check & function equipment. - Install production tree & pressure test. Test 250 psi low for 5 minutes & 9700 psi high for 10 minutes.
Daily Cost: $0
Cumulative Cost: $1,497,569

3/23/2012 Day: 24 **Completion**

Rigless on 3/23/2012 - R/U W/L RIH w/ HDY. Bailer & Impression block est. tbg. Is parted - Hold PJSM W/ BH, J & A, NFX employees and RNI driver. Discussed hazards of job to include moving equipment, high pressure pumping, manlift operation, body placement and muster area. Shut down gas compressor. Let tbg blow down to tanks. Noticed casing pressure leaked off to ~300 psi. - Well flowing and utilizing gas lift. Recovered add'l 157 BW and began recycling straight gas. After Engineering consultation, make arrangements for Baker Hughes Pumping Services to mobilize equipment to location and initiate a wellbore flushing process. RNI trucking combine frac tank bottoms into usable tanks (~750 bbls). - Well flowing and utilizing gas lift. Recovered add'l 157 BW and began recycling straight gas. After Engineering consultation, make arrangements for Baker Hughes Pumping Services to mobilize equipment to location and initiate a wellbore flushing process. RNI trucking combine frac tank bottoms into usable tanks (~750 bbls). - Well flowing and utilizing gas lift. Recovered add'l 157 BW and began recycling straight gas. After Engineering consultation, make arrangements for Baker Hughes Pumping Services to mobilize equipment to location and initiate a wellbore flushing process. RNI trucking combine frac tank bottoms into usable tanks (~750 bbls). - Resume flowing well through J & A flowback equipment. Est 52,408 BWTR. - Resume flowing well through J & A flowback equipment. Est 52,408 BWTR. - Resume flowing well through J & A flowback equipment. Est 52,408 BWTR. - Secure well & RD BHPS. - Secure well & RD BHPS. - Secure well & RD BHPS. - Hold PJSM W/ all affected NPC and contract employees concerning job discription, muster area, high pressure lines, fall protection, and location hazards. RU

Baker Hughes Pumping Services to top of production tree. Pressure test pump lines to 6000 psi. Open well W/ 325 psi & begin down tbg. Filled tbg W/ 50 BW & began to slowly gain tbg pressure. Pumped additional 70 BW W/ final injection rate of 4.8 BPM @ 2000 psi. Pressure leaked off to 1477 psi in 1 minute, then leveled off. - Hold PJSM W/ all affected NPC and contract employees concerning job discription, muster area, high pressure lines, fall protection, and location hazards. RU Baker Hughes Pumping Services to top of production tree. Pressure test pump lines to 6000 psi. Open well W/ 325 psi & begin down tbg. Filled tbg W/ 50 BW & began to slowly gain tbg pressure. Pumped additional 70 BW W/ final injection rate of 4.8 BPM @ 2000 psi. Pressure leaked off to 1477 psi in 1 minute, then leveled off. - Hold PJSM W/ all affected NPC and contract employees concerning job discription, muster area, high pressure lines, fall protection, and location hazards. RU Baker Hughes Pumping Services to top of production tree. Pressure test pump lines to 6000 psi. Open well W/ 325 psi & begin down tbg. Filled tbg W/ 50 BW & began to slowly gain tbg pressure. Pumped additional 70 BW W/ final injection rate of 4.8 BPM @ 2000 psi. Pressure leaked off to 1477 psi in 1 minute, then leveled off. - Recovered add'l 130 BW from gas lift, well returning no fluid and straight gas at this point. Arrange for pump truck to mobilize to location. - Recovered add'l 130 BW from gas lift, well returning no fluid and straight gas at this point. Arrange for pump truck to mobilize to location. - Recovered add'l 130 BW from gas lift, well returning no fluid and straight gas at this point. Arrange for pump truck to mobilize to location. - Start compressor for gas lift. Tie in remaining lines. Begin injecting 310 MCF down annulus. - Start compressor for gas lift. Tie in remaining lines. Begin injecting 310 MCF down annulus. - Start compressor for gas lift. Tie in remaining lines. Begin injecting 310 MCF down annulus. - Flow well flowing through J & A choke manifold. Recovered 144 BW. Well plugged off. - Flow well flowing through J & A choke manifold. Recovered 144 BW. Well plugged off. - Flow well flowing through J & A choke manifold. Recovered 144 BW. Well plugged off. - Open tbg. w/ 500# on 32 choke bled dwn . In 35 min. to 0# w/ ann. Staying @ 800# leave tbg. WO w/ no signs of flow SWIFN - Open tbg. w/ 500# on 32 choke bled dwn . In 35 min. to 0# w/ ann. Staying @ 800# leave tbg. WO w/ no signs of flow SWIFN - Open tbg. w/ 500# on 32 choke bled dwn . In 35 min. to 0# w/ ann. Staying @ 800# leave tbg. WO w/ no signs of flow SWIFN - Wait on orders, - Wait on orders, - Wait on orders, - Pres. Test lub. To 4500# (good) P/U RIH w/ 2 18" impression block tag @ 4085' POOH to check impression L/D tool est. parted tbg. w/ of tbg. Collar looking up - Pres. Test lub. To 4500# (good) P/U RIH w/ 2 18" impression block tag @ 4085' POOH to check impression L/D tool est. parted tbg. w/ of tbg. Collar looking up - Pres. Test lub. To 4500# (good) P/U RIH w/ 2 18" impression block tag @ 4085' POOH to check impression L/D tool est. parted tbg. w/ of tbg. Collar looking up - L/D tools bailer filled w/ H2O no fines & indications of parted tbg. - L/D tools bailer filled w/ H2O no fines & indications of parted tbg. - L/D tools bailer filled w/ H2O no fines & indications of parted tbg. - Pres test lub. To 4500# (good) RIH w/ bailer assy. Again tag in same spot 4085' unable to work through tight spot POOH (find F/L @ 2850") - Pres test lub. To 4500# (good) RIH w/ bailer assy. Again tag in same spot 4085' unable to work through tight spot POOH (find F/L @ 2850") - Pres test lub. To 4500# (good) RIH w/ bailer assy. Again tag in same spot 4085' unable to work through tight spot POOH (find F/L @ 2850") - L/D tools no recovery redress bailer - L/D tools no recovery redress bailer - L/D tools no recovery redress bailer - Csg. Pres. @ 800# tbg. @ 500# RIH w/ Bailer assy. Tag in tbg. @ 4085' worked w/l 6 ttl times falling through & cont. in to 4180' POOH to check if any recovery. - Csg. Pres. @ 800# tbg. @ 500# RIH w/ Bailer assy. Tag in tbg. @ 4085' worked w/l 6 ttl times falling through & cont. in to 4180' POOH to check if any recovery. - Csg. Pres. @ 800# tbg. @ 500# RIH w/ Bailer assy. Tag in tbg. @ 4085' worked w/l 6 ttl times falling through & cont. in to 4180' POOH to check if any recovery. - R/U H/O pres. Test lub. To 4500# (good) - R/U H/O pres. Test lub. To 4500# (good) - R/U H/O pres. Test lub. To 4500# (good) - Hold pre job safety meeting and review JSA's discuss overhead dangers & pres. Testing lub. R/U W/L M/U 3x1 11/16 wt. bars w/ 2 1/4 max OD hyd. Bailer - Hold pre job safety meeting and review JSA's discuss overhead dangers & pres. Testing lub. R/U W/L M/U 3x1 11/16 wt. bars w/ 2 1/4 max OD hyd. Bailer - Hold pre job safety meeting and review JSA's discuss overhead dangers & pres. Testing lub. R/U W/L M/U 3x1 11/16 wt. bars w/ 2 1/4 max OD hyd. Bailer - After pump night before recovered 125 bbls - After pump night before recovered 125 bbls - After pump

night before recovered 125 bbls - Remove BHPS pumpline from wing valve & RU J & A flowback line back to manifold. Pressure test with well pressure to 2800 psi--OK. Release BHPS and Perforators WLT. Turn well back over to flowback and NPC management. Est 52,347 BWTR. - Remove BHPS pumpline from wing valve & RU J & A flowback line back to manifold. Pressure test with well pressure to 2800 psi--OK. Release BHPS and Perforators WLT. Turn well back over to flowback and NPC management. Est 52,347 BWTR. - Remove BHPS pumpline from wing valve & RU J & A flowback line back to manifold. Pressure test with well pressure to 2800 psi--OK. Release BHPS and Perforators WLT. Turn well back over to flowback and NPC management. Est 52,347 BWTR. - Secure well & RD WLT. - Secure well & RD WLT. - Secure well & RD WLT. - Open well W/ 2800 psi on tbg. RIH at a cautious speed. Took weight @ 7399'. Set down 400# and takes 300# overpull to get free. Did this 3 times with same results. POOH W/ WL. Top of #3 gas lift mandrell @ 7408' (tbg talley). ~230' above 2 7/8 X 2 3/8 X-O, and ~900' above packer. - Open well W/ 2800 psi on tbg. RIH at a cautious speed. Took weight @ 7399'. Set down 400# and takes 300# overpull to get free. Did this 3 times with same results. POOH W/ WL. Top of #3 gas lift mandrell @ 7408' (tbg talley). ~230' above 2 7/8 X 2 3/8 X-O, and ~900' above packer. - Open well W/ 2800 psi on tbg. RIH at a cautious speed. Took weight @ 7399'. Set down 400# and takes 300# overpull to get free. Did this 3 times with same results. POOH W/ WL. Top of #3 gas lift mandrell @ 7408' (tbg talley). ~230' above 2 7/8 X 2 3/8 X-O, and ~900' above packer. - Bleed well pressure down to 3000 psi & secure well. Replace uppermost treecap flange W/ new one from Seaboard. RU Perforators WL truck, crane & 2 7/8" lubricator. Make-up tool string W/ 28' of 1-11/16" wieght bars, X-O subs, 1-1/2" spang jars and 5/8" sucker rod tip (OA length of 34'). Pressure test lubricator to 4915 psi. - Bleed well pressure down to 3000 psi & secure well. Replace uppermost treecap flange W/ new one from Seaboard. RU Perforators WL truck, crane & 2 7/8" lubricator. Make-up tool string W/ 28' of 1-11/16" wieght bars, X-O subs, 1-1/2" spang jars and 5/8" sucker rod tip (OA length of 34'). Pressure test lubricator to 4915 psi. - Bleed well pressure down to 3000 psi & secure well. Replace uppermost treecap flange W/ new one from Seaboard. RU Perforators WL truck, crane & 2 7/8" lubricator. Make-up tool string W/ 28' of 1-11/16" wieght bars, X-O subs, 1-1/2" spang jars and 5/8" sucker rod tip (OA length of 34'). Pressure test lubricator to 4915 psi. - Pump down tbg W/ pressure @ 6800-6950 psi. Experiencing slow leak off. Have to bleed pressure down to ~3000 psi and run into it due to pump capability. Sustain this operation until WL arrived on location. Leakoff rate varied slightly, but no noticable improvement. No measurable fluid pumped downhole during this process. - Pump down tbg W/ pressure @ 6800-6950 psi. Experiencing slow leak off. Have to bleed pressure down to ~3000 psi and run into it due to pump capability. Sustain this operation until WL arrived on location. Leakoff rate varied slightly, but no noticable improvement. No measurable fluid pumped downhole during this process. - Pump down tbg W/ pressure @ 6800-6950 psi. Experiencing slow leak off. Have to bleed pressure down to ~3000 psi and run into it due to pump capability. Sustain this operation until WL arrived on location. Leakoff rate varied slightly, but no noticable improvement. No measurable fluid pumped downhole during this process. - Begin pumping down tbg. After achieving 6800 psi 2 7/8 swage began leaking. Bleed pressure down to 3000 psi & shut in crown valve. RD flowback from wing valve and RU BH pumpline to wing valve. Re-test pumpline to 7100 psi. Contact wireline contractor & mobilize to wellsite. - Begin pumping down tbg. After achieving 6800 psi 2 7/8 swage began leaking. Bleed pressure down to 3000 psi & shut in crown valve. RD flowback from wing valve and RU BH pumpline to wing valve. Re-test pumpline to 7100 psi. Contact wireline contractor & mobilize to wellsite. - Begin pumping down tbg. After achieving 6800 psi 2 7/8 swage began leaking. Bleed pressure down to 3000 psi & shut in crown valve. RD flowback from wing valve and RU BH pumpline to wing valve. Re-test pumpline to 7100 psi. Contact wireline contractor & mobilize to wellsite. - Plan to raise MASP. Pressure test pumpline against crown valve to 7780 psi (pump max). Open crown valve & begin pumping down tbg. Had full 2" returns out annulus after 43 bbls. Pumping @ ~5 BPM @ 300 psi. Shut in master valves on tbg head (5M max plumbing to transducer). - Plan to raise MASP. Pressure test pumpline against crown valve to 7780 psi (pump max). Open crown valve & begin pumping down tbg. Had full 2" returns out annulus after 43 bbls. Pumping @ ~5 BPM @ 300 psi. Shut in master valves on tbg head (5M max plumbing to transducer). - Plan to

raise MASP. Pressure test pumpline against crown valve to 7780 psi (pump max). Open crown valve & begin pumping down tbg. Had full 2" returns out annulus after 43 bbls. Pumping @ ~5 BPM @ 300 psi. Shut in master valves on tbg head (5M max plumbing to transducer). - Open tbg to flowback through choke. Bled down quickly to a trickle. Recovered 84 BW. Annulus maintained ~400 psi. Shut in tbg & moniter pressure for 10 minutes--no gain. Bleed gas off annulus. - Open tbg to flowback through choke. Bled down quickly to a trickle. Recovered 84 BW. Annulus maintained ~400 psi. Shut in tbg & moniter pressure for 10 minutes--no gain. Bleed gas off annulus. - Open tbg to flowback through choke. Bled down quickly to a trickle. Recovered 84 BW. Annulus maintained ~400 psi. Shut in tbg & moniter pressure for 10 minutes--no gain. Bleed gas off annulus. - Start pumping down tbg. Beginning annulus press @ 244 psi. Annulus pressure climbing as tbg pressure increases. Rate and pressure varied, with annulus pressure increasing as tbg pressure increase. Pumped total of 137 BW before shutting pump down. Tbg press @ 4616 psi, ann press @ 4859 psi. - Start pumping down tbg. Beginning annulus press @ 244 psi. Annulus pressure climbing as tbg pressure increases. Rate and pressure varied, with annulus pressure increasing as tbg pressure increase. Pumped total of 137 BW before shutting pump down. Tbg press @ 4616 psi, ann press @ 4859 psi. - Start pumping down tbg. Beginning annulus press @ 244 psi. Annulus pressure climbing as tbg pressure increases. Rate and pressure varied, with annulus pressure increasing as tbg pressure increase. Pumped total of 137 BW before shutting pump down. Tbg press @ 4616 psi, ann press @ 4859 psi. - Spot and RU BHPS blender, frac pump and TMV. RU 4" pumpline to top of production tree. Pressure test pump and lines to 6195 psi--OK (5000 psi MASP planned). Replaced leaky chicksan, and had trouble getting 2 7/8 swage to hold. - Spot and RU BHPS blender, frac pump and TMV. RU 4" pumpline to top of production tree. Pressure test pump and lines to 6195 psi--OK (5000 psi MASP planned). Replaced leaky chicksan, and had trouble getting 2 7/8 swage to hold. - Spot and RU BHPS blender, frac pump and TMV. RU 4" pumpline to top of production tree. Pressure test pump and lines to 6195 psi--OK (5000 psi MASP planned). Replaced leaky chicksan, and had trouble getting 2 7/8 swage to hold. - Hold PJSM W/ BH, J & A, NFX employees and RNI driver. Discussed hazards of job to include moving equipment, high pressure pumping, manlift operation, body placement and muster area. Shut down gas compressor. Let tbg blow down to tanks. Noticed casing pressure leaked off to ~300 psi. - Hold PJSM W/ BH, J & A, NFX employees and RNI driver. Discussed hazards of job to include moving equipment, high pressure pumping, manlift operation, body placement and muster area. Shut down gas compressor. Let tbg blow down to tanks. Noticed casing pressure leaked off to ~300 psi.
Daily Cost: $0
Cumulative Cost: $1,581,609

3/25/2012 Day: 25 **Completion**

Rigless on 3/25/2012 - Spot IPS snubbing unit on location. Prepare to RU. Shut well in. - Flowback well w/ J&A Flowback. - Spot and prepare IPS snubbing unit to RU. Continue to flowback well. - Close & secure well. SDFN. No further activities. - Close & secure well. SDFN. No further activities. - Install 7 1/16" 10K BOP stack. Pressure test blind rams & 2 7/8" pipe rams to 250 psi low for 5 minutes & 8000 psi high for 10 minutes. Good test. Release pressure. Install snubbing unit BOP stack. Torque bolts & run guylines. - Install 7 1/16" 10K BOP stack. Pressure test blind rams & 2 7/8" pipe rams to 250 psi low for 5 minutes & 8000 psi high for 10 minutes. Good test. Release pressure. Install snubbing unit BOP stack. Torque bolts & run guylines. - Wait for BOP stack to be delivered. Install TWCV. Disconnect telementry sensors. Bleed down well. - Wait for BOP stack to be delivered. Install TWCV. Disconnect telementry sensors. Bleed down well. - Spot crane & wireline unit. RUWL. RIH w/ Weqatherford 2 7/8" pump thru tubing plug. Set @ 4063.5'. POOH & RDWL. Release WL crew. - Spot crane & wireline unit. RUWL. RIH w/ Weqatherford 2 7/8" pump thru tubing plug. Set @ 4063.5'. POOH & RDWL. Release WL crew. - Safety meeting. Discuss: overhead loads, crush points, FR policy, PPE & safety glasses use, muster & smoking areas. - Safety meeting. Discuss: overhead loads, crush points, FR policy, PPE & safety glasses use, muster & smoking

areas. - No activities - No activities - Shut well in. No activities. - Shut well in. No activities. - Release snubbing crew for the day. Continue to flowback well. - Release snubbing crew for the day. Continue to flowback well. - Spot and prepare IPS snubbing unit to RU. Continue to flowback well. - Flowback well w/ J&A Flowback.
Daily Cost: $0
Cumulative Cost: $1,599,868

3/26/2012 Day: 27 **Completion**

Rigless on 3/26/2012 - RU snubbing unit and pressure test. Prepare to laydown tubing. - Well shut in. No activities. - Check casing pressure: 2000 psi. Bleed down pressure. Bled to 500 psi in 3 minutes and to 0 psi in 4 minutes. Returned 1/2 bbl of fluid. Shut well in. Secure well, location & equipment. SDFN. - RU tongs. PU 2 jts 2 7/8" tubing and test snubbing BOP stack to 250 psi low for 5 minutes and 8000 psi high for 10 minutes. - Well shut in. No activities. - RU flowline to mud cross on snubbing BOP stack. Pressure test line to 250 psi low for 5 minutes & 8000 psi high for 10 minutes. RU snubbing jack. Pressure test snubbing BOP stack to 250 psi low for 5 minutes & 8000 psi high for 10 minutes. - Start & warm up equipment. Safety meeting. Discuss: working at hieghts, FR policy, overhead loads, traffic on location, muster point & smoking area. Check & function equipment. Check casing pressure. 1600 psi on casing. Bleed down casing. Bled down to 300 psi in 2 minutes and to 0 psi in 3 minutes. - Work on power pack engine for snubbing unit.
Daily Cost: $0
Cumulative Cost: $1,668,167

3/27/2012 Day: 28 **Completion**

Rigless on 3/27/2012 - Pull tubing. PU fishing tools. Prepare to PU new tubing. - Well shut in for the night. No activities. - Strap tubing. Secure well, location & unit. SDFN. - Move tubing off racks. Move new tubing onto rack. MU & PU overshot & bumper sub. Pull sslip segments out of slips & split slips. Run overshot & bumper sub into BOP stack. Reassemble slips. - Well shut in. No activities. - Unseat tubing w/ 28K pull. Pull up to work window. Release pressure on tubing thruoigh TWCV. Remove check valve. Remove tubing hanger. - Check casing pressure. 2700 psi. Bleed down casing in 6 minutes. Gas & 1 bbl of fluid.PU 2 jts of 2 7/8" tubing & stab into tubing hanger. Back out lockdown pins & tighten packing nuts. - Start & warmup equipment. Safety meeting. Discuss: Frpolicy, safety glasses, overhead loads, smoking area, muster points & days activities. Check & function equipment. - OOH.Pulled 129 jts of tubing and LD 5 gaslift mandrils. Close & lock lower blind rams. LD last joint & examine. No apparent damage to pin or threads. Found 1 bent joint one joint above EOT. Move tubing off racks. Move new tubing onto rack. MU & PU overshot & bumper sub. Pull sslip segments out of slips & split slips. Run overshot & bumper sub into BOP stack. Reassemble slips.
Daily Cost: $0
Cumulative Cost: $1,695,949

3/28/2012 Day: 29 **Completion**

Rigless on 3/28/2012 - Safety meeting. PU tubing & fishing BHA (skirted overshot w/ grapple & bumper sub). - Well shut in for the night. No activities. - Shut in well. Secure well, location & equipment. SDFN. - The Perforators Wireline Service. Pressure test lubricator to 4500 psi. Good test release pressure. RIH w/ 1.875 gauge ring. Tag fill @ 7632' (top of liner). POOH. PU & RIH w/ 1.75" guage ring. Tag @ 8077' (263' above packer). POOH. PU & RIH w/ sample catcher. Tag @ 8063'. Work sample catcher. POOH. LD sample catcher. Water in sample catcher. PU hydralic bailer. RIH & tag @ 7963'. Work bailer. POOH. LD bailer & check samples. Frac sand in bailer. Call Engineer & wait on orders. - Well shut in for the night. No activities. -

Open blind rams. Open Master valve. PU 7 RIH w/ 2 7/8" tubing & fishing tools. - Casing pressure: 2800 psi. Bleed down pressure: 3 minutes w/ 0.25 bbl fluid return. Safety meeting w/ all personnel on location. Discussed: crane safety, muster point, smokeing area, housekeeping, working at heights & days activites. - Tag & latch onto fish.Pull 15K over string weight to test packer. Space out for wireline work.
Daily Cost: $0
Cumulative Cost: $1,726,154

3/29/2012 Day: 30 **Completion**

Rigless on 3/29/2012 - Cutoff tubing. POOH and LD cutoff. - Well shut in for the night. No activities. - Shut in well. Secure well, location & equipment. SDFN. - OOH. Remove fish from grapple. Send pictures to Denver & wait on orders. No damage to top of fish. - Well shut in for the night. No activities. - RUWL. RIH w/ 1.7" chemical Cutter. Cutoff tubing @ 4092'. POOH w/WL. RD & release WL. - Wait on orders. - Casing pressure: 2800 psi. Bleed down pressure: 7 minutes w/ 3.5 bbl fluid return. Safety meeting w/ all personnel on location. Discussed: crane safety, muster point, smokeing area, housekeeping, working at heights & days activites. - POOH w/ fish.
Daily Cost: $0
Cumulative Cost: $1,794,664

3/30/2012 Day: 31 **Completion**

Rigless on 3/30/2012 - PU 2 7/8" tubing patch and RIH. Latch onto fish and land tubing. Land tubing. RD & release snubbing unit. - Lubricate out TWCV. Bleed down casing. 1350 psi, bled down in 6 minutes w/ no ga & 1 bbl fluid return. - Install production tree. Pressure test void to 10K. Gooed test. Pressure test production tree to 250 psi low for 5 minutes & 9900 psi high for 10 minutes. Good test. Release pressure. - RD snubbing unit. - Land tubing w/ 6000 lbs compression. Shut in well. - Well shut in fornthe night. No activities. - Spot & RU slickline truck. RUSL. Test lubricator to 4500 psi. Failed test. Tighten loose fitting. Retest to 4500 psi. Failed again. Worked on leaks & discovered that ratagan is rated to 3000 psi. The slickline crew were told we needed to test to 4500 psi and they did not inform the tester that their equipment was on rated to 3000psi. RD & release slickline crew. Secured well & location. SDFN. - PU 2 7/8" tubing patch. RIH w/ tubing patch & 2 7/8" tubing. - Safety meeting w/ all personnel on location. Discussed: crane safety, muster point, smokeing area, housekeeping, working at heights & days activites. - Start & warm up equipment. Casing pressure: 2200 psi. Bleed down pressure: 8 minutes w/ 8 bbl fluid return. Check & function equipment. - Tag top of fish & dressoff top of fish. Latch onto fish & swallow 10' of fish. 2 7/8" X-nipple (2.31" ID) @ 4074.92, 2 7/8" X 4' tubing sub @ 4080'. Space out on top w/ 10', 4', 2' & 4' (bottom to top) pup joints.
Daily Cost: $0
Cumulative Cost: $1,833,393

3/31/2012 Day: 32 **Completion**

Rigless on 3/31/2012 - Dump bail sand. - WSI. No activities. - Shut in well. RD & release WL crew. Secure well, location & equipment. SDFN. - Well shut in for the night. No activities. - Spot & RU The Perforator Inc wireline service. Well pressure: 2700 psi. Did not bleed off well. - Start & warm up equipment. Casing pressure: 2200 psi. Bleed down pressure: 8 minutes w/ 8 bbl fluid return. Check & function equipment. Safety meeting w/ all personnel on location. Discussed: muster point, smoking area, housekeeping, working at heights & days activites. - Pressure test lubricator to 4500 psi. Good test. Bleed down to 2800 psi. RIH w/ 1.875" guage ring. Tag @ 8200'. POOH. PU piston pump sand bailer. RIH & bail sand. POOH. Run 6 trip to

bail sand. Total sand returned approxamately 9 cups of sand. Last run got stuck. Pulled 1800 lbs over normal pull. Could not pull free. Open & close 2" valve to surge well. Dump bailer came free. POOH.
Daily Cost: $0
Cumulative Cost: $1,850,320

4/1/2012 Day: 33 **Completion**

Rigless on 4/1/2012 - Call out equipment for snubbing. Install TWCV in tubing hanger. - Well shut in for the night. No activites. - Well shut in for the night. No activities. - Tubing & casing pressure: 2800 psi. Bleed down well in 4 minues. No gas & 1/2 bbl fluid return. Well continue to occasualy returns water. Monitor well during the day. Total fluid for the day returned: 10 bbls. Receive & spot equipment. Install TWCV in tubiing hanger. Close and secure well. SDFN.
Daily Cost: $0
Cumulative Cost: $1,895,724

4/2/2012 Day: 34 **Completion**

Rigless on 4/2/2012 - Spot equipment. Install manual master valve, single gate BOP w/ 2 3/8" pipe rams - Well shut in for the night. No activities. - Secure well, equipment & location. SDFN. - Install 18' of 15K 7 1/16" ID lubricator and torque down. Install guylines. - Well shut in for the night. No activities. - Well pressure. 2200 psi. Bleed down well: 4 minutes. No gas, 1/2 bbl fluid return. ND production tree. NU 7 1/16", 10K manual gate valve, single gate 7 1/16", 10K BOP w/ 2 3/8" pipe rams, double gate 7 1/16", 10K BOP w/ 2 7/8" pipe rams on bottom & CSO blind rams on top. Torque bolts on BOP stack. Torque wrench would not fit on one flange (to thick). Call & wait for thinner torque wrench(2 hrs). Wrench on location did not send driver for wrench. Call & wait for torque wrench driver(1.25 Hrs). Could not remove wrench after torquing nuts. Call & wait for spacer spool(2 hrs). Install spool & torque all Weatherford BOP stack. pPressure test Blind, 2 3/8" & 2 7/8" rams to 250 psi low for 5 minutes & 9500 psi high for 10 minutes. Good tests. Release pressure. - Start & warmup equipment. Safety mkeeting. Discuss: days activitries, slick work areas, working at hieghts, overhead loads & PPE. Check & function equipment. - Bleed down tubing thru TWCV and remove valve.
Daily Cost: $0
Cumulative Cost: $1,943,378

4/3/2012 Day: 35 **Completion**

Rigless on 4/3/2012 - RU snubbing unit and complete all pressure test on equipment. - Well shut in over night - Safety meeting with B &G Crane ser, J &A flowback, IPS snubbing unit. Discussion RU Snubbing unit, driving on roads, pinch points, PPE and the right to stop work for safety reasons and PPE. - 07:00 AM RU Upper set BOP. Have to wait on Weatherford because their tork wrench would not work. After Weatherford hand researched the problem found that he had run out of gas in the generator and had to go to town to refill generator. Delay in starting of job approx. 1 hour. After he returned to location resumed tork on upper set of BOP's. 07:30: RU guide wires to upper stack. Pressure test 2-3/8" rams, good test. RU flow back iron off flow cross. Pressure test 2-7/8" rams and all valves on each Flow cross. 11:30: Start RU the upper jack on snubbing unit. 14:15: IPS Snubbing unit realized that they would need a two ft spool to complete the rig up. Shut down. Called Weatherford for a two ft spool. Waiting for it to be delivered to location. 16:00: Weatherford on location with spool. IPS started RU spool and jack on snubbing unit. - Pressure test J&A Flow back iron and bag on snubbing unit. Good test. Released pressure. Shut in well. SDFN
Daily Cost: $0

Cumulative Cost: $1,971,943

4/4/2012 Day: 36 **Completion**

Rigless on 4/4/2012 - Tried to release tubing off packer if not possible will have to RIH w/chemical tubing cutter and cut tubing off and pull tubing - Well shut in - POOH and LD 2 - 2 -7/8 x 2' pup 1 - 2-7/8 x 8' pup, 2 - 2-7/8" x 4' pup, 2 - 2-7/8" tbg and donut. Shut well in. SDFN.POOH and LD 2 - 2 -7/8 x 2' pup 1 - 2-7/8 x 8' pup, 2 - 2-7/8" x 4' pup, 2 - 2-7/8" tbg and donut. Shut well in. SDFN. (Note: tubing pulled heavy all the way out of the hole.) - Safety meeting with IPS, Perforators and J&A Flow back Weatherfford. B&G crane ser. Discussion about cut off tbg and TOH w/tbg, driving roads, pinch points, PPE and the right to stop work for safety reasons and PPE. - Repair complete on slip. Work tbg up and down cannot release off packer. Open casing valves and bleed pressure off while working tbg up and down. Pressure bled down to 0 psig. Shut down 15:40 Call in Denver office to get ok to release packer. 16:00 Office call back and ordered to the cut tbg off. - SICP 1500 psig. Blow down casing about 2 min to 0 pressure. RU B& G Crane Ser and Perforators, Adler Hot Oil Service. RIH w/2 - jnt 2-7/8" 1- 2 -7/8" x 4' pup 1- 2-7/8" x 8 pup, 2 - 2 -7/8" x 2' pup, screw into donut. IPS pull's 10,000 lbs over string weight to make sure we are screwed into donut. Close 2-7/8" pipe rams. Pressure up lubricator on snubbing unit to 4,000 psig. Pull tbg up 8 `and unseat donut at 10,000lbs tubing string. 13:15 pm Turn tbg to the left, to back of the top of the packer. Had problems with slip and had to shut down to work on slip. 13:30 pm Decided to take the upper slip out of the bowl and move down and replace lower set of slips in the bowl. - RU WL lubricator and pressure test to 4500 psi. Good test. Opened wellhead, RIH w/WL 1 11/16 sinker bars w/tubing chemical cutter. Tag fill @ 8,200' POH w/chemical cutter and cut tbg off @ 8170' FS. POOH w/WL and Ld Lubricator. Shut well in.
Daily Cost: $0
Cumulative Cost: $2,009,218

4/6/2012 Day: 37 **Completion**

Rigless on 4/6/2012 - Cont. to POOH w/ tbg. L/D patch & cont. to pull tbg. - Change out 2 7/8 pipe rams in BOP #s 1,2, & 3 to 2 3/8 P/U 3 jts. Of tbg. & test each ram 200-300# low for 5 min. & 8000# high for 10 min. able to get test on # 3 pipe rams but not on # 1 or 2 rams unable to go up in man to redress rams do to heavy winds & not being able to keep control of man basket will attempt to try again in tha AM SWIFN - No activity - Cont. OOH w/ 2 3/8 tbg. To cut leaving 2 jts. & 26' cut jt. For fish top. - Cont. OOH w/ 2 3/8 tbg. To cut leaving 2 jts. & 26' cut jt. For fish top. - Change over to 2 3/8 handling equip. - Change over to 2 3/8 handling equip. - SIP 0# Open well cont. OOH w/ 2 7/8 tbg. - SIP 0# Open well cont. OOH w/ 2 7/8 tbg. - Pre job safety meeting, discuss JSA's - Pre job safety meeting, discuss JSA's - Well shut in - Well shut in - Cont. to POOH w/ laying dwn. 2 7/8 tbg. & gas lift mandrels pull to depth of 1730' leaving 38 jts. 2 7/8 tbg. & 539' ttl feet of 2 3/8 tbg. Left in the hole to pull in am. - Cont. to POOH w/ laying dwn. 2 7/8 tbg. & gas lift mandrels pull to depth of 1730' leaving 38 jts. 2 7/8 tbg. & 539' ttl feet of 2 3/8 tbg. Left in the hole to pull in am. - Pull to tbg. Patch R/U 110 ton crane & L/D patch - Pull to tbg. Patch R/U 110 ton crane & L/D patch - Snubbing crew SWI eat lunch & repair slip bowl to snub if needed. - Snubbing crew SWI eat lunch & repair slip bowl to snub if needed. - Cont. to POOH w/ 2 7/8 stabbing TIW in every jt. As laying dwn - Cont. to POOH w/ 2 7/8 stabbing TIW in every jt. As laying dwn - SIP 700# bled off in 2 min. all fluid, spot pipe racks, cont. to POOH w/ tbg. Drag to depth of 8000' est. sand top @ 8000' - SIP 700# bled off in 2 min. all fluid, spot pipe racks, cont. to POOH w/ tbg. Drag to depth of 8000' est. sand top @ 8000' - Hold pre job safety meeting review JSA's - Hold pre job safety meeting review JSA's - No activity - Change out 2 7/8 pipe rams in BOP #s 1,2, & 3 to 2 3/8 P/U 3 jts. Of tbg. & test each ram 200-300# low for 5 min. & 8000# high for 10 min. able to get test on # 3 pipe rams but not on # 1 or 2 rams unable to go up in man to redress rams do to heavy winds & not being able to keep control of man basket will attempt to

try again in tha AM SWIFN
Daily Cost: $0
Cumulative Cost: $2,039,218

4/7/2012 Day: 39 **Completion**

Rigless on 4/7/2012 - Test pipe rams P/U & RIH w/ wash pipe assy. - P/U & RIH w/ wash pipe assy. As follows 3-7/8 external cutter w/ cutlip guide, 1 jt. 3-3/4 wash pipe, 3-1/8 top sub, 2-3/8 PH-6x2-3/8 eue XO, 1 jt. 2-3/8 5.95# PH-6 tbg. Followed by 248 jts. 2-3/8 tbg. EOT @ 7530' SWIFN - Hold pre job safety meeting review JSA's - 0# SIP, open well test #3-2 3/8 pipe rams 250# low for 5 min. 8000# high for 10 min. (good) Note: 3 ttl 2 3/8 ram barriers
Daily Cost: $0
Cumulative Cost: $2,106,118

4/9/2012 Day: 40 **Completion**

Rigless on 4/9/2012 - TIH w/ wash pipe & cutter circ. Clean to fish top & cut @ 8196 - Hold pre job safety meeting - Rig up stand pipe to snub unit to circ. - SWIFN - SWIFN - P/U & RIH w/ same wash pipe & cutter assy.(cutter was changed out for new) followed by 137 jts. 2 3/8 work string. EOT @ 4136' - P/U & RIH w/ same wash pipe & cutter assy.(cutter was changed out for new) followed by 137 jts. 2 3/8 work string. EOT @ 4136' - L/D wash pipe assy. Est. no fish in tools all indications were that tbg. Collar was never swallowed by cutter (most likely we were hitting cut lip of cutter on 2 3/8 square shoulder of coupling) - L/D wash pipe assy. Est. no fish in tools all indications were that tbg. Collar was never swallowed by cutter (most likely we were hitting cut lip of cutter on 2 3/8 square shoulder of coupling) - Cont. to POOH w/ 2 3/8 P-110 tbg.& washpipe & cutter assy. - Cont. to POOH w/ 2 3/8 P-110 tbg.& washpipe & cutter assy. - Hold pre job safety meeting discuss dangers of L/D wash pipe w/ poss. Cut off tbg. Inside assy. - Hold pre job safety meeting discuss dangers of L/D wash pipe w/ poss. Cut off tbg. Inside assy. - SWIFN - SWIFN - POOH w/ tbg. To 7568' (3 jts. Above LT) - POOH w/ tbg. To 7568' (3 jts. Above LT) - Engage cutter @ 8196' rotate for 10 min. could not see over pull on # indicator but did have torque change up to 1200 foot #'s - Engage cutter @ 8196' rotate for 10 min. could not see over pull on # indicator but did have torque change up to 1200 foot #'s - Cont. in hole tag fill @ 8045' wash dwn to fish top @ 8170' (reverse Circ.) wash over fish (2 3/8 tbg. Collar) @ 8194' - Cont. in hole tag fill @ 8045' wash dwn to fish top @ 8170' (reverse Circ.) wash over fish (2 3/8 tbg. Collar) @ 8194' - Wait on 2" kelly hose for circ. & rig up to tbg. For circ. Propose - Wait on 2" kelly hose for circ. & rig up to tbg. For circ. Propose - Rig up stand pipe to snub unit to circ. - Hold pre job safety meeting
Daily Cost: $0
Cumulative Cost: $2,141,868

4/11/2012 Day: 42 **Completion**

Rigless on 4/11/2012 - Cont. in hole w/ wash pipe & cutter assy. Work over tbg. Unable to get cut do to mech. tool failure POOH to 6342' - Cont. to POOH leaving EOT @ 6342' SWIFN - Speak w/ eng. Make dicision to attp. to rotate over coupling w/o shearing spring dog unable pull into dog and shear work washpipe & cutter assy. Over fish & POOH - Work cutter w/ hopes that knifes were not broking unable to get cut. - Hold pre job safety meeting & review JSA's - Cont. in to liner top tag @ 7660' rotate through (no troubles getting in) - Work on snubbing jack - 0# SIP, Cont. in hole w/ tbg. To 7600' snubbing jack began to surge and unable to get accurate weights shut dwn to repair jack. - Tag fish top @ 8170' rotate over work dwn. To tbg. Collar @ 8194' tag fill R/U Nabors rig pump break circ. Pumping rev. pump ttl of 3x tbg. Vol. (28 bbls) kick pumps out attp. To pull into collar to shear spring dog (2500#) in cutting tool. Drop dwn. To 8196' rotate 10 min. ttl est. knifes did not engage. Pull

into collar again est. pins sheared drop back dwn.attp. To cut again @ 8196' saw torque increase cut for 4 min. ttl break off cutter knifes
Daily Cost: $0
Cumulative Cost: $2,214,373

4/12/2012 Day: 43 **Completion**

Rigless on 4/12/2012 - POOH L/D wash pipe & cutter assy. Est. no fish recovered & cutter had mech. Failure & P/U RIH w/ new cutter EOT @ 5586' - Cont. to pull tbg. Leaving 105 jts. In the hole & EOT @ 3240' SWIFN - Cont. to pull tbg. Leaving 105 jts. In the hole & EOT @ 3240' SWIFN - POOH w/ tbg. To 7596' (LT @ 8660) Shut dwn. To eat lunch. - POOH w/ tbg. To 7596' (LT @ 8660) Shut dwn. To eat lunch. - Tag liner top @ 7660' rotate though, cont. in to fish top @ 8170 slide over fish top W/O rotating and dwn. To collar @ 8194 work over coupling also W/O rotating, P/U to est. spring dog in cutter will pull into collar & shear pin to engage knifes. Lower dwn 2' putting new fish top @ 8196' rotate tbg. For 15 min. to cut P/U to est. tbg. Is cut leveled out @ 51K (original string #) prep to POOH - Tag liner top @ 7660' rotate though, cont. in to fish top @ 8170 slide over fish top W/O rotating and dwn. To collar @ 8194 work over coupling also W/O rotating, P/U to est. spring dog in cutter will pull into collar & shear pin to engage knifes. Lower dwn 2' putting new fish top @ 8196' rotate tbg. For 15 min. to cut P/U to est. tbg. Is cut leveled out @ 51K (original string #) prep to POOH - Cont. in hole w/ tbg. To Liner top - Cont. in hole w/ tbg. To Liner top - Hold pre job safety meeting, Review JSA's - Hold pre job safety meeting, Review JSA's - P/U & RIH w/ wash pipe assy. As follows 3-7/8 external cutter w/ cutlip guide, 1 jt. 3-3/4 wash pipe, 3-1/8 top sub, 2-3/8 PH-6x2-3/8 eue XO, 1 jt. 2-3/8 5.95# PH-6 tbg. Followed by 180 jts. 2-3/8 tbg. EOT @ 5586' SWIFN - P/U & RIH w/ wash pipe assy. As follows 3-7/8 external cutter w/ cutlip guide, 1 jt. 3-3/4 wash pipe, 3-1/8 top sub, 2-3/8 PH-6x2-3/8 eue XO, 1 jt. 2-3/8 5.95# PH-6 tbg. Followed by 180 jts. 2-3/8 tbg. EOT @ 5586' SWIFN - L/D wash pipe assy. Est. no fish recovered & cutter had mech. Failure leaving spring dog blades 6 ttl. Blades sheared off & left on top of sand ann. Side 8200~ - L/D wash pipe assy. Est. no fish recovered & cutter had mech. Failure leaving spring dog blades 6 ttl. Blades sheared off & left on top of sand ann. Side 8200~ - 0# SIP, Cont. to POOH w/ 210 jts. 2 3/8 tbg. Wash pipe & cutter assy. Stabbing TIW valve in every jt. - 0# SIP, Cont. to POOH w/ 210 jts. 2 3/8 tbg. Wash pipe & cutter assy. Stabbing TIW valve in every jt. - Hold pre job safety meeting, review JSA's - Hold pre job safety meeting, review JSA's
Daily Cost: $0
Cumulative Cost: $2,241,973

4/13/2012 Day: 45 **Completion**

Rigless on 4/13/2012 - POOH L/D cut off tbg. P/U RIH w/ wash over shoe & 60' of wash pipe - P/U & RIH w/ BHA as follows, 3 3/4" OD,3 1/4" ID wash over shoe w/ smooth OD/ID, 2-jts. 3 3/4" OD 3 1/4" ID wash pipe, top sub 3 1/8" OD 2"ID, 2 3/8 ph-6 x eue XO 3 3/16 OD, 1 3/4" ID & 1.625 "X" profile nipple ttl length of (69.07) - Cont. OOH w/ 105 jts. Tbg. L/D 3 3/4 wash pipe & 3 7/8 Mech. Cutter tear tool dwn to est. cut off tbg. In wash pipe, recovered original 25' f/ first cut, coupling & 2' of next jt. Leaving new fish top @8196' - Hold pre job safety, review JSA's - Cont. in hole w/ 196 jts. 2 3/8 tbg. EOT @ 6015' SWIFN - Rig up IPS torque table to snubbing unit, this was @ loc. supervisors request, crew shut dwn for late lunch.
Daily Cost: $0
Cumulative Cost: $2,300,313

4/14/2012 Day: 46 **Completion**

Rigless on 4/14/2012 - TIH w/ wash pipe, wash over top of fish @ 8,196' - 8,256' - Secure

well for night - TOOH w/ wash pipe to ~6,000' - Hold pre job JSA safety meeting w/ IPS, J&A, B&G and Slaugh. - 0 PSI on well, TIH w/ wash pipe, wash to top of GLM @ 8,257' Circulate out 80 bbls, clean returns. (did not see much sand)
Daily Cost: $0
Cumulative Cost: $2,321,888

4/15/2012 Day: 47 **Completion**

Rigless on 4/15/2012 - TOOH, Pressure test snubbing stack - TOOH w/ wash pipe. L/D Wash pipe, secure well. - Hold pre job JSA safety meeting. - Change out stripper rubbers, repair HCR valve. Pressure test to 250 low 8000 high.
Daily Cost: $0
Cumulative Cost: $2,345,738

4/17/2012 Day: 48 **Completion**

Rigless on 4/17/2012 - Contr. OOH L/D wash pipe, P/U RIH w/ 3 /34" overshot, Jars & bumper sub - P/U & RIH w/ BHA as follows from btm to top 3 3/4" overshot w/ 3' ext. 2 3/8" PH-6 x 2 3/8" eue XO, 1.625 "x" profile nipple, 1 jt. 2 3/8" tbg. 2 3/8 PH-6x 2 3/8" eue XO, 3 3/4" Bumper sub w/ 1 7/8" ID, 1 jt. 2 3/8" eue tbg. 3 3/4" Jar w/ 1 7/8" ID, 1 jt. 2 3/8" eue tbg. 2 3/8" PH-6 x 2 3/8" eue XO (ttl legth 113.13) - Open well 0#, Cont. in hole w/ 175 jts. 2 /38" PH-6 tbg. 175 ttl jts. EOT @ 5450' SWIFN. - wait on XO from Vernal to arrive. - Attp. To P/U BHA discovered XO would not make up in "X" nipple due to bad thread - Snubbing unit repairs while waiting on 3 3/4" Jar f/ Slaugh fishing - Hold pre job safety meeting, review JSA,s w/ IPS, J&A, B&G, & RMT
Daily Cost: $0
Cumulative Cost: $2,366,183

4/18/2012 Day: 49 **Completion**

Rigless on 4/18/2012 - Latch on fish top @ 8196' attp. To "J" off PKR (no success) - Finish tripping in to fish top @ 8196' latch on to fish top w/ overshot (1000# packoff internally) - Work string for 4 ttl hrs. from 70k to 95k ttl string # (20-40k over string #) working 4 ttl rounds to left attp. To "J" off on/off tool @ 1 point pull 5k tension in tbg. string & rotate to right to ensure no back off was accruing dwn hole, cont. to work Jars & bumper sub w/ no success, Jars heated up not to allow us to pull to jarring # shut dwn to allow jars to cool contact Eng. Decision was make to R/U W/L in the Am SWIFN - Hold pre job safety meeting & review JSA's - Cont. in hole w/ tbg. & overshot BHA tag & rotate through L/T @ 7660'
Daily Cost: $0
Cumulative Cost: $2,399,383

4/19/2012 Day: 50 **Completion**

Rigless on 4/19/2012 - Attp. To pull "X" nipple w/ W/L & S/L unsuccessful - OOH est. no plug redress catch tool - RIH W/ same get to depth unable to ret. Plug pull tbg. Into 15k ten. Unable still put tbg. In 15k comp. no luck POOH to inspect ret. Tool (looked ok) - RIH w/ same dwn. To plug set on top of plug pump w/ test truck @ 1/4 bpm & 1600# able to pump through overshot pack off but unable to pump tool into plug POOH - RDWL - Wait on slick line to arrive on loc. - R/U s/l p/u lub. & tool string test lub. To 4500# (good) RIH w/ ret. Tool, hyd. Jars & spangs w/ 2 wt. bars tag plug & 8291' by s/l depth appeared to have recovered plug POOH no plug - Test lub. To 4500# RIH attp. To pull plug again start pumping @ depth of 5000# w/ test truck @ 1/4 bpm & 1150# once again appeared to have retrieved plug POOH

unsuccessful RDSL - SWIFN - 0# SIP, MIRU w/l & 110 ton crane, P/U lub. & tool string P/T to 4500# (good) RIH w/ 1.625 ret. Head hyd. Jars spangs & 1-# bar to plug @ 8185' unable to retrieve POOH - Hold pre job safety meeting, review JSA's
Daily Cost: $0
Cumulative Cost: $2,460,063

4/20/2012 Day: 51 **Completion**

Rigless on 4/20/2012 - Rls grapple f/ fish top & POOH - 0# SIP, open well use bumper sub to hit dwn. On fish top to RLS grapple bite kick in rotation table to the right to back off of fish. - POOH w/ 2 3/8 tbg - L/D BHA (overshot, Jar & Bumper sub) - Attp .to P/U 1 jt. Of washpipe & shoe wind kicked up to 35mph gusts B&G crane felt uncomfortable working in high winds SWIFN - Hold pre job safety meeting, review JSA's
Daily Cost: $0
Cumulative Cost: $2,496,063

4/21/2012 Day: 52 **Completion**

Rigless on 4/21/2012 - PU milling BHA, Pu tubing, Mill on fish. - Well shut in for the night. - Well shut in for the night. - Close & lock pipe rams. Secure well, location & equipment. SDFN. - Close & lock pipe rams. Secure well, location & equipment. SDFN. - POOH to replace mill. - POOH to replace mill. - RU and attach drilling swivel & kelly hose to tubing. Mill over 2 3/8" gas lift mandrill. Pump fresh water @ 2 bpm & 750 psi. Returns dirty water. Returns cleaned up and small slivers of steel & trace of sand. Feathering mill w/ 1000 - 2000 lbs on mill. Anymore weight tubing torques out. Milled approx 22". Mill stop torqueing and penetrating. Pull up 3' and circulate bottoms up twice. Try to mill. No torque or penetration. Circulate bottoms up to clear tubing. - RU and attach drilling swivel & kelly hose to tubing. Mill over 2 3/8" gas lift mandrill. Pump fresh water @ 2 bpm & 750 psi. Returns dirty water. Returns cleaned up and small slivers of steel & trace of sand. Feathering mill w/ 1000 - 2000 lbs on mill. Anymore weight tubing torques out. Milled approx 22". Mill stop torqueing and penetrating. Pull up 3' and circulate bottoms up twice. Try to mill. No torque or penetration. Circulate bottoms up to clear tubing. - PU tubing & RIH to top of fish. - PU tubing & RIH to top of fish. - Start & warm up equipment. Safety meeting. Discuss: Drillling w/ snubbing unit, high pressure, PPE, FRCs, smoking area & muster area. Check & function equipment. - Start & warm up equipment. Safety meeting. Discuss: Drillling w/ snubbing unit, high pressure, PPE, FRCs, smoking area & muster area. Check & function equipment. - Well shut in for the night. - Well shut in for the night. - Well shut in for the night. No activities. - Well shut in for the night. No activities. - Close and lock pipe rams. Secure all valves. Secure well, location & equipment. SDFN. - Close and lock pipe rams. Secure all valves. Secure well, location & equipment. SDFN. - LD 44 jts of tubing to pull above top of liner for the night. 243 jts left in the hole. - LD 44 jts of tubing to pull above top of liner for the night. 243 jts left in the hole. - Pull up 20' and circulate bottoms up. Returns of scale & some small pieces of metal. - Pull up 20' and circulate bottoms up. Returns of scale & some small pieces of metal. - Mill on fish. Cut pattern for milling. - Mill on fish. Cut pattern for milling. - RU on workstring to circulate. Establish circulation. Pump @ 2 bpm and 750 psi. - RU on workstring to circulate. Establish circulation. Pump @ 2 bpm and 750 psi. - Continue to PU workstring. Tag top of fish & workover top of fish to swallow fish. - Continue to PU workstring. Tag top of fish & workover top of fish to swallow fish. - PU 2 3/8", PH-6 workstring & tag to of liner. Work thru liner top. - PU 2 3/8", PH-6 workstring & tag to of liner. Work thru liner top. - PU fishing BHA. 3 3/4" washover shoe, 3 jts - 3 3/4" wash pipe, X- over Top sub, Bumper sub,Hydralic jars, X- over. - PU fishing BHA. 3 3/4" washover shoe, 3 jts - 3 3/4" wash pipe, X- over Top sub, Bumper sub,Hydralic jars, X- over. - Hold pre job safety meeting, review JSA's - Hold pre job safety meeting, review JSA's
Daily Cost: $0

Cumulative Cost: $2,534,269

4/22/2012 Day: 54 **Completion**

Rigless on 4/22/2012 - POOH. LD mill. PU & MU new mill. RIH w/ new mill. - POOH. - PU & RIH w/ new mill. BHA: 3 3/4" X 2.55' washover shoe (3 3/4" OD X 3 1/4" ID), 3 3/4" X 96.08' washover pipe (3 3/4" OD X 3 1/4" ID), 3 3/4" X .85" top sub (3 1/8" OD X 2" ID), 3 1/16" X 5.85' bumper sub (3 1/16" OD X 1 1/2" ID), 3" X 5.8' jar (3" ODX 1 1/2" ID), 3 1/8" X 1.15' crossover (3 1/8" OD X 1 3/4" ID). Total BHA length: 112.28'. - Well shut in for the night. - Start & warm up equipment. Safety meeting. Discuss: High pressure, LD & PU tubing, PPE, FRCs, smoking area & muster area. Check & function equipment. - Break out mill and laydown. PU & MU new mill. - Close & lock pipe rams. Close all valves. Secure well, location & equipment. SDFN. - Well shut in for the night.
Daily Cost: $0
Cumulative Cost: $2,601,117

4/23/2012 Day: 55 **Completion**

Rigless on 4/23/2012 - Continue to PU tubing. Mill off mandrill. C/O to 8271'. Pull above liner top. - PU tubing. Enter liner top w/ no problem. PU tubing, tag & swallow fish. Tag gaslift mandrill and PU 5'. - Start & warm up equipment. Safety meeting. Discuss: Continue high pressure, LD & PU tubing, PPE, FRCs, smoking area & muster area. Check & function equipment. - Mill over gaslift mandril from 8258' to 8264'. Returns of steel, stainless steel & 2-3 lbs of frac sand. Pump 40 bbls fresh water to clean well. C/O sand to 8271'. This is 22' above ON/OFF tool. Circulate bottoms to clear tubing. SD rig pump. - Very sticky pulling hard.Pull to 8260' & pipe came free. Hangback swivel & kelly hose. POOH. LD to above liner top. Total of 22 jts (7579'). 243 jts left in hole. Close & lock pipe rams. Secure well, location & equipment. SDFN. - Well shut in for the night. No activities. - RU swivel & kelly hole. Tag gaslift mandrill and PU 5'. Establish circulation w/ fresh water containing biocide & inhibitor @ 2 bpm & 800 psi. Circulate bottoms up to clean tubing. - Well shut in for the night.
Daily Cost: $0
Cumulative Cost: $2,634,892

4/24/2012 Day: 56 **Completion**

Rigless on 4/24/2012 - C/O to 8277'. Pull to 8275' and pipe stuck. Work Stuck pipe. Circ well clean. - Wait for pump operator. - RIH. Go into liner. Workover top of fish. Tag fill. - PU & hookup swivel & kelly hose. Establish reverse circulation w/ fresh water @ 1 bpm & 750 psi. Full returns. - Wash to 8277'. Pump sweep. Wrok pipe. Keep torqueing up and getting stuck. Work pipe free by pulling up to 70K . - Pump heavy sweep of Xanthan gell. - Well shut in for the night. - Jarring up 85-90K. Then overpulling to 110-115K. Max pull is 115K. - Pull pipe to 100K tension & lock down. Close TIW. Close & lock pipe rams. Secure well, equipment, & location. SDFN. - Well shut in for the night. - Start & warm up equipment. Safety meeting. Discuss: Continue C/O high pressure, LD & PU tubing, PPE, FRCs, smoking area & muster area. Check & function equipment. - Try to wash to to bottom. Torqued up & tried to PU nad pipe stuck.
Daily Cost: $0
Cumulative Cost: $2,668,910

4/26/2012 Day: 58 **Completion**

Rigless on 4/26/2012 - POOH with wash pipe and LD Reached flag nipple, layed down 3 jts

wash pipe and and jars, left in hole, 20' 2 3/8 tbging, on/off tool, 4 1/2 packer, 3-4' pump jts (2 3/8), disc sub and bull plug. Estimated 55' of BHA tools in hole. - Shut TIW, pressure up on backside to 3000 psi, worked pipe, but no movement, surge backside several times, still no movement. - Pulled up to 105, still no movement, continued jarrin - Pulled up to 105, still no movement, continued jarrin - Open TIW and Rams - Open TIW and Rams - Safety meeting - Safety meeting - Shut TIW, pressure up on backside to 3000 psi, worked pipe, but no movement, surge backside several times, still no movement. - Continued to jar, pumped 2.6 bbls fresh water down tbging, Worked pipe but still no movement. SD called Denver - Continued to jar, pumped 2.6 bbls fresh water down tbging, Worked pipe but still no movement. SD called Denver - Wait on decision from Denver. - Wait on decision from Denver. - Worked pipe up to 120, 125, 130, pipe broke free between 125-130 pulling up with 3-5 thousand drag up and down on first two jts. Then 1-3 after all the way in the 4 1/2. Pulled above liner, then went back down and tag liner with shoe, pulled 30' above, went back down tagged roughly 20' below EOT. Continue to POOH maintaining full column of fluid on backside with pump. - Worked pipe up to 120, 125, 130, pipe broke free between 125-130 pulling up with 3-5 thousand drag up and down on first two jts. Then 1-3 after all the way in the 4 1/2. Pulled above liner, then went back down and tag liner with shoe, pulled 30' above, went back down tagged roughly 20' below EOT. Continue to POOH maintaining full column of fluid on backside with pump. - Fill backside with fresh water, secure well, SSIFN, BOT @ 5051'. - Fill backside with fresh water, secure well, SSIFN, BOT @ 5051'. - Safety meeting, 20 psi on well, bled down in 1 minute. - Safety meeting, 20 psi on well, bled down in 1 minute. - POOH with remainder of tubing (161 Jts). - POOH with remainder of tubing (161 Jts). - Reached flag nipple, layed down 3 jts wash pipe and and jars, left in hole, 20' 2 3/8 tbging, on/off tool, 4 1/2 packer, 3-4' pump jts (2 3/8), disc sub and bull plug. Estimated 55' of BHA tools in hole. - Reached flag nipple, layed down 3 jts wash pipe and and jars, left in hole, 20' 2 3/8 tbging, on/off tool, 4 1/2 packer, 3-4' pump jts (2 3/8), disc sub and bull plug. Estimated 55' of BHA tools in hole. - Shut down, wait on decision from denver, then had to shut down due to high winds. - Shut down, wait on decision from denver, then had to shut down due to high winds. - SWIFN, secured well, - SWIFN, secured well,
Daily Cost: $0
Cumulative Cost: $2,739,320

4/27/2012 Day: 59 **Completion**

Rigless on 4/27/2012 - No work, due to high wind - Had to shut down today due to high winds, Winds lasted all day
Daily Cost: $0
Cumulative Cost: $2,771,420

4/28/2012 Day: 60 **Completion**

Rigless on 4/28/2012 - RU and TIH w/over shut and bumper sub and TIH to the top line. - Safety meeting with IPS , Slaugh fishing ser. Discussion on emergency phone numbers, driving on roads, pinch points, PPE and the right to stop work for safety reasons and PPE. - SCIP 300 psig. Blow casing last then one pressure at zone pressure. PU & TIH w/3-3/4"x 3-1/16"OD FN 3-1/16" x .65" Total length 5.56', OSX 3-3/4" x 1.50 OD, 1 jts 2-3/8 P-110, Bumper sub, 3-3/4" OD, 1.78 Id x 4.82', XO 3-1/8" x .95' x 1.78 OD, 30 jts 2-3/8" tbg P-110 6.4# Shut down 09:00 AM SD due to hydraulic hose leak. Hose repaired. 0930 AM PU & TIH w/247 tbg Shut wel in over night, EOT 7,637' FS, SDFN -
Daily Cost: $0
Cumulative Cost: $2,803,520

4/29/2012 Day: 61 **Completion**

Rigless on 4/29/2012 - TIH w/tubing to retrieve Fish. Latched on to Fish but could not retrieve "off and on" tool.. - Safety meeting with IPS, Weatherford.Nobars and Discussion on emergency phone numbers, driving on roads, pinch points, PPE and the right to stop work for safety reasons and PPE. - CISP 0 psig. PU & TIH w/18 jts 2-3/8" tbg L-80 6.5# P-110. Tagged top of the fish and latched on to the tbg. Turned tbg to left w/@ 600 lbs of torque, pulled 20,000lbs over work tubing string. Could not get to release off top of packer. RU Perforators WL. 11:00 am Shut down due have problem w/B&G Crane. B&G called for an E tec waiting on call back. Called 2 other Crane companies and they don't have big enough cranes for what we are needing. Curtis Crane Service called back will be on location by 9:00 AM tomorrow. Will proceed with operations. Well shut in. SDFN -
Daily Cost: $0
Cumulative Cost: $2,930,029

4/30/2012 Day: 62 **Completion**

Rigless on 4/30/2012 - Wireline operationns.Tag for fill./ Bail sand. - Safety meeting with IPS, Weatherford.Nobars, Curts's Crane, andPerferators Discussion on emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons. - Well shut in for the night. - 1600 PM Hydraststic bailer arrives, pick up lubricator and tool string assembly BHA #2 consisting of 1" OD x 6" long fishing neck 1.439 OD x 1' long cable head, 1.685" OD x 7" long (3) weight bars, 1.685" OD x 1' long CCL,1.439" OD x 9" long pin sub, .67" x 7" long X-over, 1.25" OD x 1" long slide bar, 1.50"OD x 7' long closed & 10' open with 30" stroke Pressure test to 4,800 PSI test good. 1630 PM RIH with wire line tool string BHA #2 to 8,100' pick up weight of 1,100 LBS. Continue to RIH with BHA #2 and set down at 8,264' pick up and set down 20 times stroking hydrastatic bailer, at 8,264' pull out of hole with wire line tools. 1745 PM out of hole with BHA #2. Recovered 1/4 cup of sand. 1800 PM well shut in and secured, SDFN - 1145 AM RIH with wire line tool string BHA #1 to 8,080' pick up weight of 1,100 LBS. Continue to RIH with BHA #1 and set down at 8,261' pick up and set down 4 times in same spot at 8,261' pull out of hole with wire line tools. 1400 PM out of hole with BHA #!. 1600 PM. Standby for 1.5" OD Hydrostatic baile. - 0830 AM MIRU Curt's Crane, and Preferators Wire line unit, pick up lubricator and have to lay lubricator down and move crane to side. With 140' of boom wouldn¿t have enough room between shive and top of packoff, added another 20' section of boom to have 160' of boom. MIRU crane and lubricator and tool string assembly BHA #1 consisting of 1" OD x 6" long fishing neck 1.439 OD x 1' long cable head, 1.685" OD x 7" long (3) weight bars, 1.685" OD x 1' long CCL,1.439" OD x 9" long pin sub, .67" x 7" long X-over, 1.25" OD x 1" long slide bar, 1.685"OD x 5'10" long with 9" stroke junk basket with 1.25" x 3" pin bar. Pressure test to 4,800 PSI test good.
Daily Cost: $0
Cumulative Cost: $2,973,505

5/1/2012 Day: 63 **Completion**

Rigless on 5/1/2012 - Run sand bailer. - Well shut in for the night. - Cloe TIW valve & install night cap. Secure well, equipment & location. SDFN. - Install 1 5/8" hydrostatic bailer. RU lubricator to WH. Pressure test to 4800 psi. No leaks, release pressure. Open TIW valve. RIH. Tag @ 8264'. Thump down w/ 50' to 75' strokes. Stroked bailer 20 times. No over pull. POOH. - RU lubricator to WH. Pressure test to 4800 psi. No leaks, release pressure. Open TIW valve. RIH w/ weight bars & CCL on bottom of BHA. PU weight: 1100 lbs @ 8100'. Tag fill @ 8264'. POOH. - Wind speed @ 40 mph. SD wait for wind to die down. - At surface. Remove sand bailer. RU to run CCL log. - Well shut in for the night. - At surface. Remove spud rod. Install 1.5" OD X 48" sand bailer. - RU lubricator to WH. Pressure test to 4800 psi. No leaks, release pressure. Open TIW valve.RIH. PU weight: 1150 lbs @ 8100'. Tag fill @ 8263'. Stroke spud rod 30 times. Made about 2'. POOH. - RU spud rod to RIH. Wind @ 40 mph. SD & wait for

wind to die down. - Wait for spud rod from Vernal. - Start & warm up equipment. Safety meeting with IPS, Weatherford. Nabors, Curts's Crane, B&G Cranes and Perferators Discuss: emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons. Check and function equipment. - RU lubricator to WH. Pressure test to 4800 psi. No leaks, release pressure. Open TIW valve.RIH. PU weight: 1100 lbs @ 8100'. Tag fill @ 8265'. Stroke sand bailer 15 times. POOH
Daily Cost: $0
Cumulative Cost: $3,010,873

5/2/2012 Day: 64 **Completion**

Rigless on 5/2/2012 - Run 1.5" magnet in tubing. Run sand bailer. - Well shut in for the night. - Close TIW valve & install night cap on tubing. Secure well, equipment & location. SDFN. - Run #8: Remove magnet. Install 1 5/8" hydrostatic bailer. RIH w/ bailer. Tag @ 8264'. Hard tag on fill. Shear pin. POOH. Recovered 2 tablespoons of thick emulsyfied oil and dirty water. - Well shut in for the night. - Install 1.5" magnet w/ 2" skirted notched shoe. - Wait on magnet to be delivered. - Start & warm up equipment. Safety meeting with IPS, Weatherford. Nabors, Curts's Crane, B&G Cranes and Perferators Discuss: emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons. Check and function equipment. - Run #1: RIH w/ skirted magnet. Tag @ 8264' WL corrilated depth. Stroke magnet 6 times. POOH. No junk recovered. Run #2: Remove magnet & RIH w/ 5/8'" rod w/ barbs welded on the rod. Tag fill @ 8264'. Spud rod into fill to loosen fill. POOH and LD spud rod. Install 1.5" magnet with flat bottom. Run #3: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Recovered metal pieces. Clean off magnet. Run #4: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Recovered metal pieces. Clean off magnet. Run #5: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Recovered metal pieces. Clean off magnet. Run #6: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Recovered metal pieces. Clean off magnet. Run #7: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Recovered metal pieces. Clean off magnet.
Daily Cost: $0
Cumulative Cost: $3,059,306

5/3/2012 Day: 65 **Completion**

Rigless on 5/3/2012 - Run 1.5" mill and 1 5/8" hydrostatic bailer. - Well shut in for the night. - Close TIW valve & install night cap on tubing. Secure well, equipment & location. SDFN. - Well shut in for the night. - Run #1: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Clean off magnet.Recovered metal pieces. Run #2: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Clean off magnet.Recovered metal pieces. Run #3: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Clean off magnet.Recovered metal pieces. Run #4: RIH w/ flat bottom mill. Tag @ 8264'. Stroke magnet 6 times. POOH. Clean off magnet.Recovered metal pieces. - Start & warm up equipment. Safety meeting with IPS, Weatherford. Nabors, Curts's Crane, B&G Cranes and Perferators Discuss: emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons. Check and function equipment. - Run #5: Remove magnet. Install 1 5/8" hydrostatic bailer. RIH w/ bailer w/ copper shear pin.. Tag @ 8264'. Hard tag on fill. Shear pin. POOH. Recovered dirty water. Run #6: Redress bailer w/ brass shear pin. RIH w/ bailer. Tag @ 8264'. Hard tag on fill. Shear pin. POOH. Recovered 2 tablespoons of thick emulsyfied oil and dirty water. Rolled one side of the shoe.
Daily Cost: $0
Cumulative Cost: $3,107,739

5/4/2012 Day: 66 **Completion**

Rigless on 5/4/2012 - Land tubing & RD snubbing unit. - Secure well, equipment & location. SDFN. - RD snubbing unit, flowback inro to well head. Cranes & move snubbing trailers to side of location, out of way of coiled tubing unit. - Well shut in for the night. - Start & warm up equipment. Safety meeting with IPS, Weatherford, Nabors, Curts's Crane, B&G Cranes and Perferators Discuss: emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons, Rigging down equipment w/ cranes. Check and function equipment. - Release overshot. Space out tubing for landing. Install 2 3/8" tubing hanger on tubing w/ TWCV. Land tubing. Run in hanger lokdown pins and measure for correct length. Back out landing joints and laydown. Close master gate valve. Close & lock blind rams.
Daily Cost: $0
Cumulative Cost: $3,145,348

5/9/2012 Day: 67 **Completion**

Rigless on 5/9/2012 - Wait on Coiled Tubing to arrive on location. RUCT. - Wait on coiled tubing unit to arrive on location. - 1800 PM. PJSM With Cudd, TTS, Weatherford, J&A flow back. 1830 PM. Spot & RU Cudd 1.25" coiled tubing unit. 2030 PM. CT gooseneck and hose extensions rigged up, Pull 2 way check valve and start rigging up BOP stack. 0200 AM. BOP hoses rigged up and function test BOP's test good. 0330 AM. Continue rigging up CTU and BOP stack 0500 AM. Begin pressure testing BOP stack as per NFX specs 0600 AM. At report time continue pressure testing BOP stack
Daily Cost: $0
Cumulative Cost: $3,198,000

5/10/2012 Day: 68 **Completion**

Rigless on 5/10/2012 - Continue rigging up CT and pressure testing RIH and tag at 8,266' CTM - 2300 PM pressure testing completed as per NFX Specs. Open well RIH with BHA #1, circulating .75 BPM, Rolling pump over slowly at .25 BPM down 7" x 2 3/8", 0340 AM Tagged at 8,266' CTM and rotated gained 1K point back pick up and pulled heavy, pump sweep, sat back down 2 more times and last timed pulled 5K over string weight, set jars off to pull free. 0430 AM sweep out of coil start to pull out of hole. 0600 AM at report time continue to pull out of hole with CT and BHA #1 - Safety meeting. Discuss: emergency phone numbers, driving on roads, pinch points, over head loads, PPE and the right to stop work for safety reasons, Rigging down equipment w/ cranes. Check and function equipment. - 0630 AM. Continue to pressure test BOP stack. 0800 AM. Test shear rams. Blew seal ring. Order replacement from Vernal. Change out Cudd 40 ton crane for B&G 80 ton crane. 0900 AM. Replace "O" ring on shear ram door. 1030 AM. Continue rigging up BOP stack & pressure as per NFX specs 1700 PM. Install BHA & as per NFX specs 1800 PM. At report time replace stripper seal rubber & door seal in stripper head - 1800 PM Continue to door seal in stripper head 2030 PM Seal changed out, Make up BHA #1 Consisting of 1.70" OD x .75" ID x 1' long external slip type connector, 1.70" OD x .69" ID x 1.35" long dual BPV, 1.70" OD x .56" ID x 5.12" long HZ impact jar, 1.70" OD x .45" ID x 1.52' long hyd. Disconnect, 1.70" OD x .38" ID x 1.84' long dual circulating sub W/rupture disc, 1.70" OD x 8.29' long titan motor, 1.70" OD x 1.13' ID x 5.93' long Venturi jet junk basket w/ 4' junk housing, 1.70" OD x .50" ID x .96" long wash pipe wavy bottom section.26.01' long total length. Perform pressure test as per NFX Specs, NU lubricator and continue pressure test as per NFX Specs.
Daily Cost: $0
Cumulative Cost: $3,282,125

5/11/2012 Day: 69 **Completion**

Rigless on 5/11/2012 - Run venturi junk basket recover metal and rubber, run motor and 4 blade mill to 8,307' - 0600 AM At report time continue surging 2 3/8" x 1 1/4" pressuring up to 2,500 psi and surging to tank. - 2300 PM currently at 5,000¿ continue to RIH with BHA #3 circulating .75 BPM at 2,100 psi. And pumping .25 down 7¿ x 2 3/8¿ at .25 BPM at 890 PSI. While recovering 1 BPM in returns.0015 AM set down at 8,266' start rotating on debris. Increase pump rate to 1BPM at 2,700 PSI and pumping .25 BPM down 7" csg at 1000 psi. Recovering 1.3 BPM0030 AM Currently at 8,268' pumped sweep and milling at 1 FPM pick up weight 13 K setting off jars and returning to normal pipe weight of 8,600 LBScirculating 1 BPM at 2,700 psi and 7" holding 1,000 psi with no circulation recovering 1.1 BPM> 0140 AM At 8,284' continue milling at 1 FPM and working pipe up to 8,260' pumping sweeps every 30 minutes pick up weight 13 to 15 K setting off jars and returning to normal pipe weight of 8,600 LBS circulating 1 BPM at 2,700 psi and7" holding 1,000 psi with no circulation recovering 1.1 BPM> 0230 AM Tagged at 8,307' and motor stalled picked up pulling 5k over stringweight and jars didn't go off set weight down on jar to reset picked up to 7Kover string weight with no jar action continued to work pipe to 10 to 12 K overstring weight with no jar action motor stalled with 3,300 psi. Talked to Cudd and they would like to surge back side and work pipe pulling up to 23 K a few more times. Talked to TTS and they are recommend to drop ball and disconnect offand fish with a Speer and new jars. 0355 AM Currently pressuring up on 1 1/4 x 2 3/8 to 1,000 psi to surge back side to attempt to free coil - 1830 PM CT at surface disconnecting lubricator and break off, Venturi jet junk basket and recovered chunks of rubber, metal shavings, and cement or shale. 2030 PM make up BHA #3 Consist of: 1.70" OD x .75" ID x 1' long external slip type connector, 1.70" OD x .69" ID x 1.35" long dual BPV, 1.70" OD x .56" ID x 5.12" long HZ impact jar, 1.70" OD x .45" ID x 1.52' long hyd. Disconnect, 1.70" OD x .38" ID x 1.84' long dual circulating sub W/rupture disc, 1.70" OD x 8.29' long titan motor, 1.70" OD x .77' long 4 blade convex mill, 19.89' long total length.. Attach lubricator to WH. Pressure test lubricator.2100 PM Pressure testing completed RIH with BHA #3, circulating .75 BPM at 2,100 psi. And pumping .25 down 7¿ x 2 3/8¿ at .25 BPM at 890 PSI. While recovering 1 BPM in returns - 12:15 - Check well pressure. No pressure. Open master valve & RIH. 14:45 - Weight check @ 8100'. Weight @ 8200 # & pumping @ 0.75 bpm & 3100 psi. Increase FR from 0.25 gal/ 10 bbls to 0.75 gal/ 10 bbls. 15:00 - Tag fill @ 8266'. Tag w/ 500 #. Increase pump rate to 1 bpm. Work pipe to clean fill. Work pipe from 8266' to 8268' in 10 minutes. Continue to work pipe. For 20 minutes. No further progress. 15:30 - POOH. 16:45 - Pressure drop on casing from 800 psi to 600 psi. Pump to bring pressure back to 1000 psi. Started to inject @ 0.25 bpm & 900 psi. 18:00 - OOH. Shut in well. Disconnect lubricator. - POOH. - Check stripper rubber. Rubber good. No hydralic pressure to stripper head. Bleed hydralic lines to stripper. Stripper repaired. - BHA #2 Consist of: 1.70" OD x .75" ID x 1' long external slip type connector, 1.70" OD x .69" ID x 1.35" long dual BPV, 1.70" OD x .56" ID x 5.12" long HZ impact jar, 1.70" OD x .45" ID x 1.52' long hyd. Disconnect, 1.70" OD x .38" ID x 1.84' long dual circulating sub W/rupture disc, 1.70" OD x 8.29' long titan motor, 1.70" OD x 1.13' ID x 5.93' long Venturi jet junk basket w/ 6' junk housing, 1.70" OD x .50" ID x .96" long wash pipe wavy bottom section.28.01' long total length.. Attach lubricator to WH. Pressure test lubricator. Stripper rubber leaking. - Call to see what to run next. - OOH. Disconnect lubricator. Remove & C/O venturi junk basket. 1/2 cup of large chunks of metal, large piece of rubber & metal shavings. - Pressure test lubricator. Good test. Release pressure.
Daily Cost: $0
Cumulative Cost: $3,371,418

5/12/2012 Day: 70 **Completion**

Rigless on 5/12/2012 - POOH with CT, MIRU wireline and run CCL, RDMO wireline and CTU - 08:30 ¿ Pump down CT w/ pump starved for fluid to create vibrations. Pull on tubing to 20K. No movement. SD pump. 09:00 ¿ Slack off tubing and hold @ 14K. Wait on orders. 10:00 ¿

Safety meeting. Discuss: CT disconnect procedure. Setup to disconnect tool string. CT string weight set @ 8000#. 10:30 ¿ Drop ball to disconnect. Pump 14 bbls @ 0.75 bpm & 3200 psi. CT volume is 8 bbls. No disconnect. SD pump. Check ball drop for ball. Ball still at surface. Reposition reel. Drop ball. Pump 10 bbls @ 0.75 bpm & 3200 psi. No disconnect. SD pump. Check ball drop for ball. Ball still at surface. Reposition reel. Drop ball. Pump 8 bbls @ 0.75 bpm & 3500 psi. Pressure to 6500 psi. SD pump. 11:30 - Pull on CT to 11500#, weight dropped to 9900#. Continue to pull up hole. Weight @ 8200# (string weight). Clear 2 3/8¿ tubing fish top @ 8196¿. POOH. 14:30 ¿ OOH. Disconnect lubricator. Break off tools from CT. - 15:00 ¿ Spot The Perforators Wireline Service. Safety meeting. RUWL. Make up BHA: 1.375¿ CCL w/ flat bottom protector & 2 ea &¿ X 1.375¿ titaninum weight bars. Attach lubricator to well. Pressure WL lubricator to 4800 psi for 10 minutes. Good test. Release pressure & open master valve. 17:45 ¿ RIH. Perform PU check @ 8200¿. String weight 1150#. Correlate to bumper sub @ 8158¿ WLM. Contunue in hole. Tag CT tools @ 8294¿ WLM. Run CCL log from 8194¿ WLM to 8000¿ WLM. Stop logging. 18:30 ¿ POOH. 19:00 ¿ OOH. RD & release WL crew. Wait on orders. - 20:15 ¿ Well SI and secured wire line rigged down and off location. 20:30 ¿ Begine RDMO Cudd CTU 01:00 ¿ Cudd CTU rigged down and off location, well SI and secured 2 3/8" tbg 0 psi. 7" csg 0 psi. SDFN 01:00 ¿ 0600 Well shut in and secured - 07:30 ¿ SD pump. Switch to pump down CT annulus. 07:45 - Pump down CT annulus @ 1 bpm & pressure up to 2500 psi. Surge back 8 times. No movement. 08:00 - SD pump. Wait on orders.
Daily Cost: $0
Cumulative Cost: $3,496,157

5/14/2012 Day: 71 **Completion**

Rigless on 5/14/2012 - RD Cudd 1.25" CT unit. Wait on IPS snubbing unit. - Well shut in for the night. - Well shut in for the night. - 18:30 ¿ Secure well, equipment & location. SDFN. - 18:30 ¿ Secure well, equipment & location. SDFN. - 16:00 ¿ Test BOP stack to 200-300 psi low for 10 minutes & 8000 psi high for 30 minutes. - 16:00 ¿ Test BOP stack to 200-300 psi low for 10 minutes & 8000 psi high for 30 minutes. - Well shut in waiting on IPS Snubbing unit. - 07:00 ¿ Spot B&G crane, IPS snubbing equipment, catwalk & rig pump. 08:30 ¿ RU & pressure test IPS snubbing unit. RU Nobel pump & pit. RU J&A flowback equipment to well. - 06:30 ¿ Safety meeting w/ IPS, RMT, J&A & Nobel Well Service. Discuss: FRC¿s, PPE, assembly points, smoking area, overhead loads, using tag lines, pinch & crush points, high pressure testing, dehydration & heat stroke, stopping the job & housekeeping. - 06:30 ¿ Safety meeting w/ IPS, RMT, J&A & Nobel Well Service. Discuss: FRC¿s, PPE, assembly points, smoking area, overhead loads, using tag lines, pinch & crush points, high pressure testing, dehydration & heat stroke, stopping the job & housekeeping. - Well shut in for the night - Well shut in for the night - Well shut in waiting on IPS Snubbing unit. - 07:00 ¿ Spot B&G crane, IPS snubbing equipment, catwalk & rig pump. 08:30 ¿ RU & pressure test IPS snubbing unit. RU Nobel pump & pit. RU J&A flowback equipment to well.
Daily Cost: $0
Cumulative Cost: $3,512,557

5/15/2012 Day: 73 **Completion**

Rigless on 5/15/2012 - Cut TBG at 8,286' TOOH laying down TBG. - PJSM with all crew members on location - 850 psi SICP this am. BD to pit. Approx. 1 bbl return and bled to 0 psi with no additional flow. Currently RU EWL and we will RIH with 1 11/16" GRJB to 8296'. Our plan is to RIH with and cut tubing at 8286'. RIH with GRJB to 8294'. POOH with no problems. PU and RIH with 1 11/16 cutter at 4000' with 10K tension pulled over string weight. Set down with cutter at 8,294' pick up and tie in RIH to 8,277' with 9' stand off with cutter at 8,286' Appeared cutter cut TBG, felt good jar on well head and appears to have 1' movement up on tbg collars from previous collar log, pull out of hole wiith cutter tool string. 1330 PM pick up on tbg with free movement at 50k, RDMO wire line unit, Continue to pull out of hole laying down

space out subs and TBG hanger, Continue to tooh laying down tbg. 1800 PM Currently have 170 JTS in with 95 JTS out. Well shut in and secured SDFN.
Daily Cost: $0
Cumulative Cost: $3,589,463

5/16/2012 Day: 74 **Completion**

Rigless on 5/16/2012 - Continue TOOH laying down TBG PU WT 33K, Pick up BHA #1 tih - 1430 PM Connections tightened and continue to TIH with BHA #1 consisting of wash pipe shoe 3.75" OD x3" ID x 2.52' long, pup joint 3 3/4" OD x 3 1/4" ID x 3.85' long, cross over 3 3/4" OD x 3" ID c .35' long, overshot 3 1/16 x 2" ID x 1.96' long, x-over 3 1/16" OD x 1.50" ID x 1.30' long, x-over 3 1/16" OD x 1.7/8" ID x 1.10' long, bumper sub 3 3/4"OD x 1 7/8" ID x 4.82' long, x-over 3" OD x 1.7/8"ID x .89' long, XN-Nipple 1.625" x-over 3 1/16" OD x 1.7/8" ID x 1.30' long, 1 JT 2 3/8" eue 8 rd, jars 3 3/4" OD x 1 7/8" ID 4.64' long, x-over 3 1/8" OD x 1.75" ID x 1.10' long, 1 JT 2 3/8 PH6 Tbg and 1.625 x-nipple, Continue to pick up TBG and TIH With BHA #1. 1900 PM EOT and BHA #1 at 2,051" well shut in an secured SDFN - PJSM with all crew members on location - 0700 AM Continue TOOH laying down TBG PU WT 33K 1230 PM TBG at surface with over shot, cut joint 31.3, gas lift mandrel, x-over, cut joint 21.4' long, prepare to pick BHA to TIH for fish. - 1230 PM TBG at surface prepare to pick BHA to TIH for fish. BHA lengths and ID/OD to follow BHA #1 consisting of wash pipe shoe 3.75" OD x3" ID x 2.52' long, pup joint 3 3/4" OD x 3 1/4" ID x 3.85' long, cross over 3 3/4" OD x 3" ID c .35' long, overshot 3 1/16 x 2" ID x 1.96' long, x-over 3 1/16" OD x 1.50" ID x 1.30' long, x-over 3 1/16" OD x 1.7/8" ID x 1.10' long, bumper sub 3 3/4"OD x 1 7/8" ID x 4.82' long, x-over 3" OD x 1.7/8"ID x .89' long, XN-Nipple 1.625" x-over 3 1/16" OD x 1.7/8" ID x 1.30' long, 1 JT 2 3/8" eue 8 rd, jars 3 3/4" OD x 1 7/8" ID 4.64' long, x-over 3 1/8" OD x 1.75" ID x 1.10' long, 1 JT 2 3/8 PH6 Tbg and 1.625 x-nipple
Daily Cost: $0
Cumulative Cost: $3,631,963

5/17/2012 Day: 75 **Completion**

Rigless on 5/17/2012 - RIH and wash over fish - 1500 PM Continue in hole from 8267-8279. At 8279 began washing fill. It appears we were washing mostly sand. CIH from 8279-8293.5 washing. Clint never saw the top of the fish. Continue reverse circulating at 3 BPM at 2,250 PSI with 10 BBL sweep. Start washing down over fish recovering light sand, small pieces of rubber and small metal shavings, continue reverse circulating with 3 gel sweeps 30 minutes apart. 1615 PM washed 3.5' over fish had to pick up above fish and continue reverse circulating gel sweeps around due to lighting and high wind. Had to SD at 8293.5 and due to lightning. We were down about 45 min due to storm. During this time we continued RC the hole clean at 3.0 bpm at 3000 psi. 1700 PM Continue reverse circulating and washing an rotating over fish at 3 BPM at 2,600 psi. After the storm they began rotating down and made 6" to 8294 and at this time they plugged off returns, torqued up picked 5-8K over. Clint believes he can swallow 3-6" more. 1900 PM EOT and BHA #1 at 8,294", Pressure up on back side to 2,500 PSI. Well shut in an secured SDFN - PJSM with all crew members on location - 0700 AM Continue to TIH with TBG from 2,051', SICP 0 PSI. 1215 PM currently at JT 247 at 7,648' prepare to continue TIH with BHA # prepare to go into liner top 1500 PM PJSM currently at 8,267' prepare to start reverse circulating and wash down over fish
Daily Cost: $0
Cumulative Cost: $3,688,608

5/18/2012 Day: 76 **Completion**

Rigless on 5/18/2012 - Work TBG to free packer made 25' total - 1100 AM established reverse

circulation at 2 BPM at 4,000 psi and holding 2,500 psi on Tbg start gel sweeps with dye and FR and pipe on pipe 1345 PM Reverse circulated dyed gel sweep and pipe on pipe with FR around and back at surface at 318 bbls. Currently shut down due to wind gusting to 55 mph. Total footage made so far 24' currently RC at 2 BPM at 4,000 psi and holding 2,500 psi on Tbg. Will continue working pipe when wind subsides 1530 PM Resume operations continue to work Tbg holding 2,500 psi. Down for 1 hr 45 minutes due to wind 1830 PM Made a total of 25' today worked Tbg from 8,297' to 8,271' and stopped moving. Set Tbg in compression with 42 K down with 2,400 psi shut in. Well shut in and secured SDFN - PJSM with all crew members on location - 0700 AM SICP 2150 psi. Prepare to pressure up to 3,500 PSI and turn to the right to release packer assembly 1045 AM Made a total of 14' on 1st joint and laid JT down worked 2nd joint up 10' with a total of 24' up hole maintaining 2,700 psi. At present time prepare to start reverse circulation holding 2,700 psi. If we can RC start pumping chemicals
Daily Cost: $0
Cumulative Cost: $3,744,174

5/19/2012 Day: 77 **Completion**

Rigless on 5/19/2012 - Continue jarring on packer and pull out of hole - 1730 PM All TBG and Fish at surface, break down BHA #1, Pressure up CSG to 2,500 PSI. well shut in and secured, SDFN - 0630 AM PJSM 0700 AM Shut in with 2,500 psi. Weight 0 still in compression, rigged Cudd pump up, start reverse circulating 1 BPM at 2,800 psi holding 2,500 psi on Tbg - 0700 AM Shut in with 2,500 psi. Weight 0 still in compression, rigged Cudd pump up, start reverse circulating 1 BPM at 2,800 psi holding 2,500 psi on Tbg 0800 AM Start bleeding off back pressure in 500 PSI increments, from 2,800 PSI, to 2,300 PSI, 1,800 PSI, 1,300 PSI, 800 PSI, to 300 PSI, to 0 PSI. and continue working TBG, 0915 AM Tbg started moving jarring up at 105K and weight fell to 50K and drug for 5' at 62K and weight fell to 55K continued to drag for 15' at 53 to 55K continue pulling at 51K pulled 2 jts out, continue pulling laying down Tbg with 0 psi with no flow 1100 AM joint 245 laid down with 244 in currently joints above liner top continue to TOOH weighing 46K and filling csg with no flow to tanks 0 psi on well
Daily Cost: $0
Cumulative Cost: $3,803,256

5/20/2012 Day: 78 **Completion**

Rigless on 5/20/2012 - Pick up TTS BHA & TIH - 1830 PM BHA#2 at 7,574' with 245 JTS in set hanger with plug in place, and lock in pins, 3 JTS off top of liner, well shut in and secured with 2,500 PSI. on backside. Prepare to rig down IPS stand a lone snubbing unit. 1930 PM well shut in and secured SDFN. - - 0700 Am Service equipment while waiting on TTS tools - 1100 AM Make up BHA # 2 consisting of 3.75" OD concave twister mill, 2.88" OD x-over, 2.88" OD hydraulic disconnect, 2.88" OD bi-directional jar, 2.88" OD back pressure valve, 3.13" OD x-over, and 1 JT 2 3/8" 5.95# tbg, 2.91" OD x 1.71" ID RN-Nipple and 160 JTS of 2 3/8" 5.95# tbg 1200 PM BHA #2 Picked up start TIH with BHA #2
Daily Cost: $0
Cumulative Cost: $3,848,518

5/21/2012 Day: 79 **Completion**

Rigless on 5/21/2012 - RDMO IPS stand alone snubbing unit, MIRU nabors WSU and IPS rig assist snubbing unit - 1830 PM Well shut in and secured SICP 2,300 PSI. - 0630 AM PJSM - 0700 AM start RDMO IPS stand alone snubbing unit. SICP 2300 PSI. - 1330 PM IPS snubbing unit rigged down and off to side rams swapped out to 2 3/8" MIRU Nabors WSU and IPS rig assist snubbing unit.

Daily Cost: $0
Cumulative Cost: $3,890,107

5/22/2012 Day: 80 **Completion**

Rigless on 5/22/2012 - Pressure test stack and start drilling out sleeves. - 0520 - mix & pump 10 bbl sweep, 10 bbl pad, 10 bbl sweep & 300 bbl displacement for bottoms up. Returning light to medium sand & some metal. - 0000 - Tag sand plug. C/O plug. Casing pressure increased from 2100 psi to 2600 psi. 0100 - tag 1st sleeve @ 8920', 1 minute D/O time, pumping @ 4 bpm & 3600 psi. 0225 - tag 2nd sleeve @ 9115', 1.5 minute D/O time, pumping 4 bpm & 3600 psi. 0345 - tag 3rd sleeve @ 9330', 1 minute D/O time, pumping @ 4 bpm & 3600 psi. 0430 - cleaned out choke & found large piece of metal in choke. See attached picture. 0515 - tag 4th sleeve @ 9510', 1 minute D/O time, pumping @ 4 bpm & 3600 psi. - 0630 AM PJSM - 1245 PM Pull plug and hanger up and remove. 1345 Continue to TIH with BHA #2 to 1st sleeve 1600 PM Currently have 265 JTS in at 8,241' currently picking up swivel to start rotating and circulating down 1830 PM Swivel picked up start pumping 1 1/2 BPM filling TBG, catch pressure and increase rate to 3 3/4 BPM at 3,600 PSI, holding 2,200 PSI on CSG Torque 1,000 PSI. NEUT WT. - 38K, SO WT. 37K, PU WT 39.5K 1900 PM Rerun snub line to derrick leg. - 0700 AM Start pressure testing bop's and snubbing unit, unload 144 JTS 2 3/8" PH-6 5.95# TBG. - 1930 PM Continue rotating and circulating and running TBG
Daily Cost: $0
Cumulative Cost: $3,957,913

5/23/2012 Day: 81 **Completion**

Rigless on 5/23/2012 - Continue to Drillout Sleeves - 05:00 - Kelly cock sealed off with Teflon tape. Resume PU & RIH w/ tubing to tag sleeve #15. 06:00Tag sleeve #15 @ 11,601'. Drill on sleeve w/ 3.75 bpm & 4,800 psi w/ 1.5 gal FR per 10 bbls. Returning 3.5 bpm @ 2,900 psi. Netural WT. ¿ 36K, PU wt. ¿ 38K, SO wt. ¿ 35K. FS torque ¿ 1200 psi, DRL torque ¿ 2,250 psi. - 03:30 ¿ Drilled thru sleeve #14. Leak in set screw hole on power swivel Kelly cock. Tighten screw. Still leaking. Remove & Teflon tape screw. Leak stopped. Will leak with tubing string weight but no leak while setting in slips. Leave in slips to minimize leak. Pmp 10 bbl sweep & continue to circulate @ 4 BPM at 4,600 PSI w/ 1.5 gallons friction reducer per 10 bbls while waiting on replacement Kelly cock to arrive from Vernal. - 0657 AM Retagged sleeve #4 at 9,494' and drilled in 18 MIN circulating 3.75 BPM at 4,700 PSI. Return 3.6 BPM at 2,800 PSI. PU WT 36K. SO WT 33.4K. NEUT WT 35.3K. Torque FS 1,500 PSI. Drilling 2,400 PSI. Pump 10 sweep continue to TIH to sleeve #5 0820 AM Tagged sleeve #5 at 9,686' and drilled in 15 MIN circulating 4 BPM at 4,600 PSI. Return 3.75 BPM at 2,900 PSI. PU WT 36.6K. SO WT 33.5K. NEUT WT 35.4K. Torque FS 1,600 PSI. Drilling 2,200 PSI. Pump 10 sweep continue to TIH to sleeve #6 0930 AM Tagged sleeve #6 at 9,876' and drilled in 7 MIN circulating 4 BPM at 4,400 PSI. Return 3.75 BPM at 2,750 PSI. PU WT 37.9K. SO WT 34.6K. NEUT WT 35.8K. Torque FS 1,400 PSI. Drilling 2,200 PSI. Pump 10 sweep continue to TIH to sleeve #7 1030 AM Tagged sleeve #7 at 10,065' and drilled in 34 MIN circulating 4 BPM at 4,400 PSI. Return 3.75 BPM at 2,800 PSI. PU WT 38K. SO WT 34.4K. NEUT WT 35.9K. Torque FS 1,200 PSI. Drilling 2,400 PSI. Pump 10 sweep continue to rotating and circulating to sleeve #8 1155 AM Tagged sleeve #8 at 10,257' and drilled in 9 MIN circulating 4 BPM at 4,300 PSI. Return 3.75 BPM at 2,750 PSI. PU WT 38K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,300 PSI. Pump 10 sweep continue to rotating and circulating to sleeve #9 1250 PM Tagged sleeve #9 at 10,444' and drilled in 4 MIN circulating 4 BPM at 4,300 PSI. Return 4 BPM at 2,700 PSI. PU WT 38K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,300 PSI. Pump 10 sweep continue to rotating and circulating to sleeve #10 - 1345 PM Stop TIH Last rabbitin tbg. While running tubing and drilling sleeves this evening, one of the IPS hands who had been responsible for removing the API drift while picking up tubing failed to make sure drift was out of tubing. The tubing joint which the drift was inside was subsequently made up and they

began pumping prior to realizing it was left in the last joint picked up. with TBG.The guys backed out the top joint hoping it was still lodged but it had fell downhole in the tubing string. Lay down swivel and pickup tongs 1445 PM Start Pulling out of hole laying down Tbg pick up WT 40K 1515 PM Recovered rabbit in jt 13 laid down jt and recovered rabbit, Made up TIW with pump line and started 10 BBL sweep at 3.5 BPM at 4,100 PSI, recovering 3.5 BPM at 2,700 PSI. Circulating bottoms up, Currently picking up swivel to start rotating, Will run rabbit on catwalk and chase with rod on before picking up joint. - 18:45 - Tagged sleeve #10 at 10,655' and drilled in 13 MIN circulating 4 BPM at 4,300 PSI. Return 3.75 BPM at 2,900 PSI. PU WT 37K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #11. 19:45 - Tagged sleeve #11 at 10,945' and drilled in 27 MIN circulating 4 BPM at 4,800 PSI. Return 3.75 BPM at 2,750 PSI. PU WT 37K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,200 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #12. 20:53 - Tagged sleeve #12 at 11,050' and drilled in 11 MIN circulating 4 BPM at 4,800 PSI. Return 4 BPM at 2,700 PSI. PU WT 37K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #13. 22:00- Tagged sleeve #13 at 10,655' and drilled in 42 MIN circulating 4 BPM at 4,600 PSI w/ 1.5 gallons friction reducer per 10 bbls. Return 3.75 BPM at 2,900 PSI. PU WT 37K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #14. 00:45 ¿ Tag sleeve #14. Pump 10 bbl gel sweep, 10 bbl pad, 10 bbl gel sweep, 300 bbls flush (bottoms up) to clean well bore. 02:15 ¿ Re-tagged sleeve #14 at 10,945' and drilled in 60 MIN circulating 4 BPM at 4,500 PSI. Return 3.75 BPM at 2,750 PSI. PU WT 37K. SO WT 35K. NEUT WT 36K. Torque FS 1,200 PSI. Drilling 2,400 PSI.

Daily Cost: $0

Cumulative Cost: $4,028,325

5/24/2012 Day: 82 **Completion**

Rigless on 5/24/2012 - Drill out Sleeves and tag duel hyd sleeve at 12,546' circulate 3 bottoms up, TOOH laying down tbg - 18:00 ¿ POOH laying down tubing. - 16:00 PM - Circulated 3 bottoms up (900 BBLS) while rotating and working TBG, circulated clean, lay down swivel and pick up tongs, prepare to TOOH laying down TBG. - 07:25 AM - Tagged sleeve #16 at 11,786' and drilled in 15 MIN circulating 4 BPM at 4,400 PSI. Return 4 BPM at 2,700 PSI. PU WT 37K. SO WT 34K. NEUT WT 35K. Torque FS 1,500 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #17. 08:25 AM - Tagged sleeve #17 at 11,970' and drilled in 22 MIN circulating 4 BPM at 4,700 PSI. Return 4 BPM at 2,700 PSI. PU WT 37.3K. SO WT 34K. NEUT WT 35.6K. Torque FS 1,500 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #18 09:35 AM - Tagged sleeve #18 at 12,165' and drilled in 15 MIN circulating 4 BPM at 4,700 PSI. Return 4 BPM at 2,600 PSI. PU WT 39K. SO WT 33.5K. NEUT WT 35.5K. Torque FS 1,400 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to sleeve #19. 10:38 AM - Tagged sleeve #19 at 12,358' and drilled in 14 MIN circulating 4 BPM at 4,600 PSI. Return 4 BPM at 2,600 PSI. PU WT 38K. SO WT 34K. NEUT WT 35.5K. Torque FS 1,400 PSI. Drilling 2,400 PSI. Pump 10 bbl sweep continue to rotating and circulating to duel Hyd. sleeve. 11:35 AM Tagged duel hyd. sleeve at 12,546' Start circulating 3 bottoms at 4 BPM at 4,600 PSI. Return 4 BPM at 2,600 PSI. PU WT 39K. SO WT 34K. NEUT WT 35.5K. - 00:00 ¿ 275 jts (8552¿) left in hole. Move 144 jts of tubing off pipe rack to keep separated. 00:15 ¿ Continue to LD tubing. 06:00 ¿ Casing pressure@ 2750 psi. No oil in flowback tank. 118 jts (3671¿) in well. String weight @ 6500#. Close & lock pipe rams. Install & close TIW valve. Waiting on mechanic from Rock Springs to repair snubbing unit power pack. - 19:15 ¿ Engine for snubbing unit died. No hydraulics for annular preventer & BOP stack.Working to restart engine. Called for mechanic. 22:15 - Snubbing unit power pack still down. Mechanic will be here in AM from Rock Springs to work on unit. Attached Weatherford accumulator to BOP stack & annular preventer.

Daily Cost: $0

Cumulative Cost: $4,096,899

5/25/2012 Day: 83 **Completion**

Rigless on 5/25/2012 - Continue to tooh with tbg, RIH set packer - 0730 AM Snubbing power unit running found kill switch on panel in basket tripped, continue to snub out of hole from 3,671' SICP 2,750 PSI. 1300 PM All TBG and BHA at surface lay down tool string, prepare to rdmo IPS snubbing unit, SICP 2,750 PSI. - RDMO IPS snubbing unit and move out work string. Prep for wire line - PJSM with all crew members on location 1600 PM MIRU Perforators wire line unit, pressure test lubricator 1945 PM RIH with 1 11/16" cable head, 2 weight bars 5' x 2.75" OD, 3 1/8" CCL, 4' junk basket, 6.02" OD gauge ring 2110 PM OOH with GRJB make up packer assembly 2150 PM TIH with 1 11/16" cable head, 3 1/8" CCL and firing head, #20 E-4 wireline pressure setting tool, Baker 7" 10K hornet packer, 2 7/8" 4' pup JT 6.5#, baker XN-nipple 2.205" ID, 2 7/8" 4' pup JT 6.5#, WLEG W/pump out plug set at 1,500 psi. 2252 PM Set baker 10K hornet packer at 7,534'. Appeared packer set POOH with wireline 2330 PM Wireline at surface, while pulling out of hole bleed down csg slowly, perform negative pressure test, 2400 AM well has no flow shut in and secure, RDMO wireline unit while removing lubricator oil was present. Had 2 7/8" 6.5# EUE Tbg drifted, pins, collars cleaned, and inspected found 4 bad joints. 0100 AM Well shut in and secured SDFN - 06:00 ¿ Casing pressure@ 2750 psi. No oil in flowback tank. 118 jts (3671¿) in well. String weight @ 6500#. Close & lock pipe rams. Install & close TIW valve. Waiting on mechanic from Rock Springs to repair snubbing unit power pack.
Daily Cost: $0
Cumulative Cost: $4,183,509

5/26/2012 Day: 84 **Completion**

Rigless on 5/26/2012 - TIH with production tbg - 1930 PM Start reverse circulating PKR fluid around with biocide and corrosion inhibitor 1945 PM Reverse Circulated packer fluid around with 280 bbls. Prepare to space out and land Tbg and hanger with TWCW in hanger. 2015 PM Latched packer and landed Tbg with 10K in compression. RD Nobel service unit. Start pressure testing hanger from top and test csg. - 0730 AM Change out TBG ram blocks,install hydrill and start pressure testing stack - PJSM with all crew members on location - 00:00 - Continue to pressure test. 01:00 - Pressure test complete. - 01:00 - RD BOP stack. 02:00 - Install production tree. 02:30 - Pressure test production tree. Test 250 psi low for 5 minutes & 10,000 psi high for 10 minutes. Good test. Release pressure. 02:45 - Pull TWCV. 03:15 - Pump out ceramic disc in packer. Pump 10 bbls after breaking disc. - 03:30 - RD & release Cudd pump truck. RU flowback iron to well. 04:30 - Open well to flowback to production on 6/64¿ choke & 2650 psi.. Turn well over to production @ 04:30. Clean up location & release rental equipment. - Flowback well to production. - 1300 PM Pick up Baker L-10 on off tool and 1 JT 2 7/8" 6.5 L-80 EUE Tbg, 2.313" X-Nipple, 237 JTS 2 7/8" 6.5 L-80 EUE Tbg, 10' PUP JT 2 7/8" 6.5 L-80 EUE Tbg, 1 JT 2 7/8" 6.5 L-80 EUE Tbg, Continue to TIH with TBG 1730 PM Tagged packer at 7,534' pick up Prepare to start reverse circulating packer fluid.
Daily Cost: $0
Cumulative Cost: $4,277,506

6/24/2012 Day: 85 **Completion**

Rigless on 6/24/2012 - Capture final costs in DCR - Cost Adjustment in DCR for non-captured costs - 7/1/12, additional costs captured in DCR¿SH. Zubiate inv#862a ($670), inv#838a ($566) in 881162.
Daily Cost: $0
Cumulative Cost: $4,350,597

7/21/2012 Day: 86 **Completion**

Rigless on 7/21/2012 - MIRU Nabors ri #1416. NUBOP & test. Unseat tubing. Disconnect from packer. Pump down tubing. - 09:30 ¿ SITP ¿ 150psi. SICP ¿ 0 psi. RU hard line to rig flat tank. BDW. 07:00 ¿ Spot Nabors Rig #1416. RUSU. - 17:00 - SDFWE. All personnel off location. 16:30 ¿ SD pump. Pumped 100 bbls down tubing. No returns & no pressure. Close TIW valve. Close & lock pipe rams. Secure well, equipment & location. Well complete shut in. SDFWE. - 06:30 ¿ Safety meeting. JSA. JHA. Muster point, smoking area, housekeeping, stop the job, good communications, working around hot oiler, high pressure & dehydration. 06:00 ¿ Service, Start & warm up equipment. - 15:00 - Remove tubing hanger. Install tubing collar & TIW valve. RU Kelly hose. Establish circulation down tubing w/ produced water heated to 175 degrees. Pump @ 2.5 bpm & 0 psi with no returns. 14:30 ¿ Backout tubing hanger lockdown pins. Unseat tubing hanger (52K pull). Pull 6K over string weight to insure packer still set. Slack off to 4K set on packer. ¿J¿ off of packer w/ ¼ lefthand torque on tubing. Pull tubing hanger to floor. Release pressure on tubing & remove TWCV. - 12:15 ¿ Pressure test Blind rams, pipe rams & Annular preventor to 300 psi low for 5 minutes & 3000 psi high for 10 minutes, Good test. Release pressure. Heating water to pump down tubing. 10:00 ¿ Install TWCV. ND production tree. NUBOP & annular preventor. Torque flanges. Change pipe rams from 2 3/8¿ to 2 7/8¿.
Daily Cost: $0
Cumulative Cost: $4,363,667

7/23/2012 Day: 87 **Completion**

Rigless on 7/23/2012 - RIH w/ SL. Set XN positive plug. POOH w/ tubing - 06:30 ¿ Safety meeting. JSA. JHA. Muster point, smoking area, housekeeping, stop the job, good communications, working around hot oiler, high pressure & dehydration. 06:00 ¿ Service, Start & warm up equipment. - 07:30 ¿ RU & test SL lubricator to 3000 psi. Release pressure. 07:00 ¿ SITP ¿ 20 psi. SICP ¿ 20 psi. Pump 30 bbls heated (2200) produced water to clear tubing. Spot & RU Delsco SL. - 13:00 ¿ OOH w/ SL. RDSL. ¿J¿ off packer. Release SL. 12:15 ¿ Set XN plug @ 7542¿SLM. POOH. 11:00 ¿ Open TIW valve. RIH w/ SL. Pump heated (2200) produced water to help set XN plug. - 17:00 ¿ SD due to lightening in area. 16:45 ¿ OOH. Finish straping tubing. 13:30 ¿ POOH standing back 2 7/8¿ tubing. Strap out of hole. - 19:00 ¿ Secure well, equipment & location. SDFN. All personnel off location. 18:30 ¿ SD. EOT @ 5530¿. Install & close TIW valve. Close & lock pipe rams. 17:30 ¿ RIH w/ 2 7/8¿ tubing & gas lift mandrils. - 10:30 ¿ SL OOH. Remove broach. Install XN positive plug on SL. Attach SL lubricator to well. Pressure test SL lubricator to 3000 psi. Release pressure. 08:00 ¿ RIH w/ SL 2.4¿ pineapple broach to 7455¿. Tag X nipple. POOH w/ broach. Pump heated (2200) produced water to help SL get out of hole.
Daily Cost: $0
Cumulative Cost: $4,401,776

7/24/2012 Day: 88 **Completion**

Nabors #1460 on 7/24/2012 - RIH with 2 7/8" Tubing,GLV.Latch onto packer,NU Tree SDFN. - Sapce out tubing with 6'x2 7/8" sub and make up tubing hanger.Latch onto packer and land tubing string with 15K compression.1300 hrs-Start ND BOP's.1500 hrs-NU production tree and start testing.Could not get tree to test past 8,000 psi.Tree cap was leaking.Shut down and wait for cameron to bring new cap and flange.1800 hrs replace tree cap flange and start testing again to 9500 psi.1900 hrs RU Delsco SLU,RU and test lubricator and test to 3,000 psi.RIH with fishing tool down to 7,542' and latch onto plug.Work plug to free up.POOH with fishing tool and plug was not on.Left plug and sleeve stem in well.Shut well in SDFN.Will RIH

in the with G-1 fishing tool and pull plug.2 7/8" Tubing in well as follows: 1.53' on/off tool.1 jt 2 7/8" tubing,1.12' XN-Nipple,9 GLV,240 jts 2 7/8" to surface,6 x 2 7/8' pup sub to space out with and tubing hanger.EOT @ 7,531.65' - 0630-0700 hrs.Hold pre-job safety meeting with crew.JSA,housekeeping,muster piont,smoking area on location.0700 hrs-Star RIH with 2 7/8" tubing and GLV.0850 in the hole with tubing and GLV.0900-1045 hrs latch onto packer and get space out measurements.Release off packer and pump 290 bbls packer fluid around @ 3.0 bpm.
Daily Cost: $0
Cumulative Cost: $4,428,599

7/25/2012 Day: 89 **Completion**

Nabors #1460 on 7/25/2012 - Swab on well.Fish out positive plug from tubing. - 0630-0700 Hrs.safety meeting,JSA,Housekeeping,muster points for emergency,smoking area.RU Slickline and test lubricator to 3,000 psi.RIH with G-1 fishing tool down to 7,540' and latch onto plug.0900 Hrs start trying to get plug unseated.Couldn't get plug to come unseated.Shear off plug and POOH.1000 Hrs Bypass flowline to production tank.1100 Hrs-RU WOR lubricator and start swabbing.Start FL-75' EFL-2,000' recovered 20 bbbl's fluid.1500 Hrs-RU slickline and test lubricator to 3,000 psi.RIH with G-1 fishing tool and tag fluid level @ 2,100 SLM.Continue RIH down to 7,540' and latch onto plug. - Start working slickline and pulled plug out of XN-Nipple.1600 Hrs-Start POOH with fishing tools and plug.1700 Hrs-OOH with slickline and plug.RDMO SLU.RD WOR and park on the edge of location.Leave well open to production tanks per production foreman SDFN.Will turn well over to production tomorrow.
Daily Cost: $0
Cumulative Cost: $4,438,606

Pertinent Files: Go to File List

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: PATENTED

1a. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☑ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other: _____

6. If Indian, Allottee or Tribe Name:

7. Unit or CA Agreement Name and No.:

2. Name of Operator: NEWFIELD EXPLORATION COMPANY

8. Lease Name and Well No.: Thorne 4-21-3-2WH

3. Address: 1401 17TH ST. SUITE 1000 DENVER, CO 80202

3a. Phone No. *(include area code)*: (435) 646-3721

9. AFI Well No.: 43-013-51067

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**

10. Field and Pool or Exploratory: WILDCAT

At surface: 223' FNL & 1008' FWL (NW/NW) SEC. 21, T3S, R2W (PATENTED)

11. Sec., T., R., M., on Block and Survey or Area: SEC. 21, T3S, R2W

At top prod. interval reported below: 882' FNL & 821' FWL (NW/NW) SEC. 21, T3S, R2W (PATENTED)

At total depth: ~~854~~ 870 FSL & ~~763~~ 1008' FWL (SW/SW) SEC. 21, T3S, R2W (PATENTED) BHL by HSM

12. County or Parish: DUCHESNE

13. State: UT

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
01/03/2011	02/23/2012	☐ D & A ☑ Ready to Prod. 03/20/2012	5150' GL 5168' KB

18. Total Depth:	19. Plug Back T.D.:	20. Depth Bridge Plug Set:
MD 12700' TVD 8319'	MD 12632' TVD 8322	MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
DUAL IND GRD, SP, COMP. DENSITY,COMP. NEUTRON,GR,CALIPER, CMT BOND

22. Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☑ Yes (Submit copy)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	9-5/8" K-55	36#	0	2520'		478 PREMLITE			
						178 PREMLITE			
						72 CLASS G			
8-3/4"	7" P-110	26#	0	8832'		375 PREMLITE		600'	
						460 50/50 POZ			
6-1/8"	4-1/2" P-110	13.5#	7662'	12675'					

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	EOT @ 8278'	On/Off Tool@8277'						

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	8909'	12559'	8909-12559'	16.9 sq. in.	19	Ball Drop Sleeves
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
8909-12559'	Frac w/968387# 30/50 white sand & 186389# 100 mesh; 40387 bbls Slickwater Fluid; 20 stages.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
5/27/12	6/6/12	24	→	1051	837	480			GAS LIFT SYSTEM

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					PRODUCING

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

*(See instructions and spaces for additional data on page 2)

RECEIVED
Oct 30 2012
DIV. OF OIL, GAS & MINING

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status

29. Disposition of Gas *(Solid, used for fuel, vented, etc.)*

SOLD AND USED FOR FUEL

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
WASATCH	8909'	12559'		GREEN RIVER EPA	4152'
				MAHOGANY BENCH	6247'
				GARDEN GULCH 1	7384'
				WASATCH	9410'
				TF40 RB	10534'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☑ Directional Survey

☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Jennifer Peatross Title Production Technician

Signature Date 10/26/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

NEWFIELD

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT
THORNE 4-21-3-2W
THORNE 4-21-3-2W

THORNE 4-21-3-2W CURVE/LAT

Survey: Survey #1

Standard Survey Report

20 February, 2012

Weatherford®

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Site THORNE 4-21-3-2W
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Site:	THORNE 4-21-3-2W	**MD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Well:	THORNE 4-21-3-2W	**North Reference:**	True
Wellbore:	THORNE 4-21-3-2W CURVE/LAT	**Survey Calculation Method:**	Minimum Curvature
Design:	THORNE 4-21-3-2W CURVE/LAT	**Database:**	EDM 2003.21 Single User Db

Project	DUCHESNE COUNTY, UT		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	THORNE 4-21-3-2W				
Site Position:		**Northing:**	7,249,664.47 ft	**Latitude:**	40° 12' 50.560 N
From:	Lat/Long	**Easting:**	2,025,784.32 ft	**Longitude:**	110° 7' 12.020 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.88 °

Well	THORNE 4-21-3-2W					
Well Position	**+N/-S**	0.00 ft	**Northing:**	7,249,664.47 ft	**Latitude:**	40° 12' 50.560 N
	+E/-W	0.00 ft	**Easting:**	2,025,784.32 ft	**Longitude:**	110° 7' 12.020 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,149.90 ft

Wellbore	THORNE 4-21-3-2W CURVE/LAT				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2011	1/5/2012	11.33	65.90	52,255

Design	THORNE 4-21-3-2W CURVE/LAT					
Audit Notes:						
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	7,871.00	
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**		
	0.00	0.00	0.00	178.68		

Survey Program **Date** 2/20/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
225.00	7,871.00	Survey #1 (THORNE 4-21-3-2W PILOT H(	MWD	MWD - Standard
7,983.00	12,700.00	Survey #1 (THORNE 4-21-3-2W CURVE/L	MWD	MWD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,900.00	2.59	248.65	7,898.82	-4.73	-20.34	4.26	0.00	0.00	0.00
8,000.00	9.90	226.06	7,998.22	-10.18	-29.12	9.50	7.58	7.31	-22.59
8,100.00	22.24	218.19	8,094.01	-31.83	-46.86	30.74	12.50	12.34	-7.87
8,200.00	33.61	206.10	8,182.30	-71.39	-71.30	69.73	12.65	11.37	-12.09
8,300.00	42.08	188.98	8,260.29	-130.51	-90.66	128.39	13.43	8.47	-17.12
8,400.00	49.82	179.44	8,330.65	-201.35	-92.72	199.16	10.32	7.73	-9.54
8,500.00	60.18	186.97	8,387.05	-283.57	-96.71	281.27	12.05	10.36	7.53
8,600.00	68.98	192.30	8,431.05	-372.10	-110.79	369.45	10.03	8.80	5.33
8,700.00	84.17	193.12	8,454.70	-466.49	-132.43	463.32	15.21	15.19	0.83
7"									
8,788.28	87.50	195.06	8,460.27	-551.88	-154.08	548.20	4.36	3.78	2.19
8,800.00	88.20	195.57	8,460.71	-563.18	-157.17	559.42	7.40	5.94	4.41

NEWFIELD

Weatherford International Ltd.

Survey Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Site THORNE 4-21-3-2W
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Site:	THORNE 4-21-3-2W	**MD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Well:	THORNE 4-21-3-2W	**North Reference:**	True
Wellbore:	THORNE 4-21-3-2W CURVE/LAT	**Survey Calculation Method:**	Minimum Curvature
Design:	THORNE 4-21-3-2W CURVE/LAT	**Database:**	EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,900.00	91.12	196.78	8,460.22	-658.75	-186.56	654.28	3.16	2.93	1.21
9,000.00	94.90	194.25	8,455.14	-754.92	-213.39	749.81	4.54	3.78	-2.53
9,100.00	94.69	188.62	8,445.72	-852.44	-233.19	846.86	5.62	-0.21	-5.63
9,200.00	92.02	183.31	8,440.72	-951.68	-244.00	945.81	5.93	-2.67	-5.31
9,300.00	90.58	177.26	8,438.77	-1,051.61	-243.82	1,045.73	6.22	-1.44	-6.05
9,400.00	90.07	173.87	8,437.99	-1,151.26	-235.63	1,145.54	3.42	-0.52	-3.39
9,500.00	90.63	172.26	8,437.37	-1,250.53	-223.60	1,245.06	1.70	0.56	-1.61
9,600.00	91.42	171.75	8,436.51	-1,349.43	-208.87	1,344.27	0.94	0.79	-0.51
9,700.00	91.90	169.63	8,433.49	-1,448.15	-193.24	1,443.32	2.17	0.49	-2.12
9,800.00	92.89	168.47	8,428.97	-1,546.28	-174.59	1,541.86	1.52	0.98	-1.16
9,900.00	92.04	167.55	8,423.74	-1,643.87	-153.39	1,639.91	1.25	-0.85	-0.92
10,000.00	92.37	166.43	8,419.93	-1,741.21	-130.81	1,737.74	1.16	0.33	-1.12
10,100.00	93.17	168.44	8,414.48	-1,838.78	-109.66	1,835.77	2.16	0.80	2.01
10,200.00	92.08	165.85	8,411.65	-1,936.03	-86.62	1,933.53	2.81	-1.09	-2.59
10,300.00	91.88	164.28	8,407.34	-2,032.65	-61.26	2,030.71	1.58	-0.20	-1.56
10,400.00	91.21	164.98	8,405.16	-2,128.98	-34.51	2,127.63	0.97	-0.67	0.70
10,500.00	91.47	166.01	8,402.04	-2,225.90	-10.10	2,225.08	1.06	0.26	1.03
10,600.00	92.37	167.89	8,398.76	-2,323.27	12.44	2,322.94	2.09	0.90	1.88
10,700.00	91.39	168.76	8,396.17	-2,421.08	33.05	2,421.20	1.31	-0.99	0.87
10,800.00	92.06	170.72	8,391.55	-2,519.41	50.61	2,519.91	2.07	0.67	1.96
10,900.00	90.53	170.24	8,390.72	-2,617.96	67.52	2,618.82	1.60	-1.53	-0.48
11,000.00	91.31	171.69	8,386.66	-2,716.89	81.44	2,718.04	1.65	0.78	1.45
11,100.00	91.22	172.24	8,386.47	-2,815.71	96.66	2,817.19	0.55	-0.10	0.54
11,200.00	90.40	172.61	8,384.58	-2,914.87	109.33	2,916.62	0.90	-0.82	0.37
11,300.00	89.94	172.89	8,383.28	-3,014.23	120.47	3,016.21	0.53	-0.46	0.28
11,400.00	91.51	176.00	8,380.91	-3,113.72	130.09	3,115.88	3.48	1.57	3.11
11,500.00	92.26	176.25	8,378.37	-3,213.42	137.30	3,215.73	0.79	0.75	0.25
11,600.00	92.59	177.01	8,373.09	-3,313.14	142.62	3,315.54	0.83	0.33	0.76
11,700.00	93.89	177.32	8,367.99	-3,412.86	148.08	3,415.36	1.34	1.30	0.31
11,800.00	92.30	176.35	8,361.16	-3,512.50	152.89	3,515.08	1.86	-1.59	-0.97
11,900.00	93.78	176.16	8,356.17	-3,612.14	159.45	3,614.85	1.49	1.48	-0.19
12,000.00	94.11	175.42	8,350.68	-3,711.65	167.59	3,714.52	0.81	0.32	-0.74
12,100.00	92.65	175.20	8,344.17	-3,811.10	175.69	3,814.13	1.48	-1.46	-0.22
12,200.00	92.77	173.61	8,340.34	-3,910.56	185.28	3,913.79	1.60	0.12	-1.60
12,300.00	92.71	174.67	8,335.48	-4,009.95	195.15	4,013.38	1.06	-0.05	1.06
12,400.00	91.59	172.83	8,331.56	-4,109.30	205.78	4,112.95	2.15	-1.13	-1.83
12,500.00	93.04	173.46	8,327.86	-4,208.53	217.56	4,212.42	1.58	1.45	0.63
12,600.00	91.63	171.69	8,323.68	-4,307.61	230.34	4,311.76	2.26	-1.41	-1.78
LAST SVY									
12,640.00	92.78	171.66	8,322.14	-4,347.15	236.13	4,351.44	2.88	2.88	-0.07
4-1/2									
12,699.56	92.78	171.66	8,319.26	-4,406.02	244.76	4,410.48	0.00	0.00	0.00
PROJ SVY - PBHL THORNE 4-21-3-2W									
12,700.00	92.78	171.66	8,319.23	-4,406.45	244.82	4,410.92	0.00	0.00	0.00

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,788.28	8,460.27	7"	7	8-3/4
12,699.56	8,319.26	4-1/2	4-1/2	6-1/8

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Site THORNE 4-21-3-2W
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Site:	THORNE 4-21-3-2W	**MD Reference:**	WELL @ 5167.90ft (PIONEER 68)
Well:	THORNE 4-21-3-2W	**North Reference:**	True
Wellbore:	THORNE 4-21-3-2W CURVE/LAT	**Survey Calculation Method:**	Minimum Curvature
Design:	THORNE 4-21-3-2W CURVE/LAT	**Database:**	EDM 2003.21 Single User Db

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
12,640.00	8,322.14	-4,347.15	236.13	LAST SVY
12,700.00	8,319.23	-4,406.45	244.82	PROJ SVY

Checked By: _____ Approved By: _____ Date: _____

NEWFIELD

Weatherford®

Project: DUCHESNE COUNTY, UT
Site: THORNE 4-21-3-2W
Well: THORNE 4-21-3-2W
Wellbore: THORNE 4-21-3-2W CURVE/LAT
Design: THORNE 4-21-3-2W CURVE/LAT
Latitude: 40° 12' 50.560 N
Longitude: 110° 7' 12.020 W
GL: 5149.90
KB: WELL @ 5167.90ft (PIONEER 68)

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL THORNE 4-21-3-2W	8327.00	-4450.97	102.38	40° 12' 6.572 N	110° 7' 10.700 W	Point

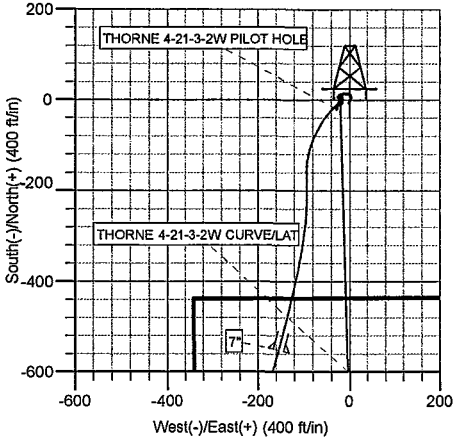
WELL DETAILS: THORNE 4-21-3-2W

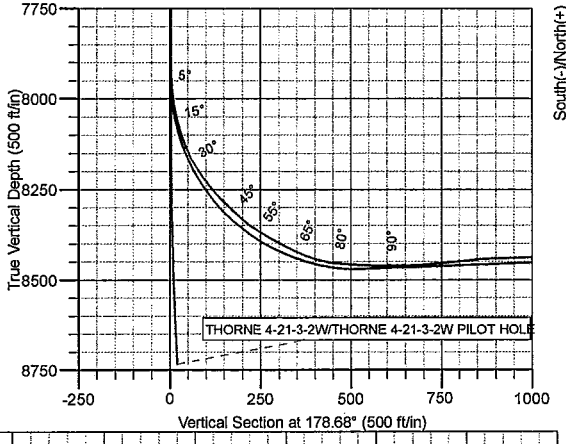
Ground Level: 5149.90

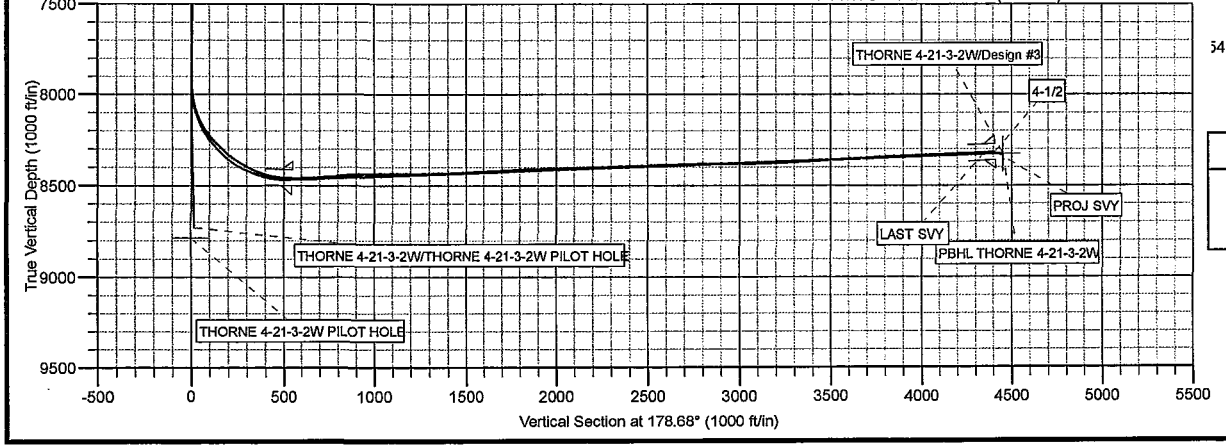
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	7249664.47	2025784.32	40° 12' 50.560 N	110° 7' 12.020 W	

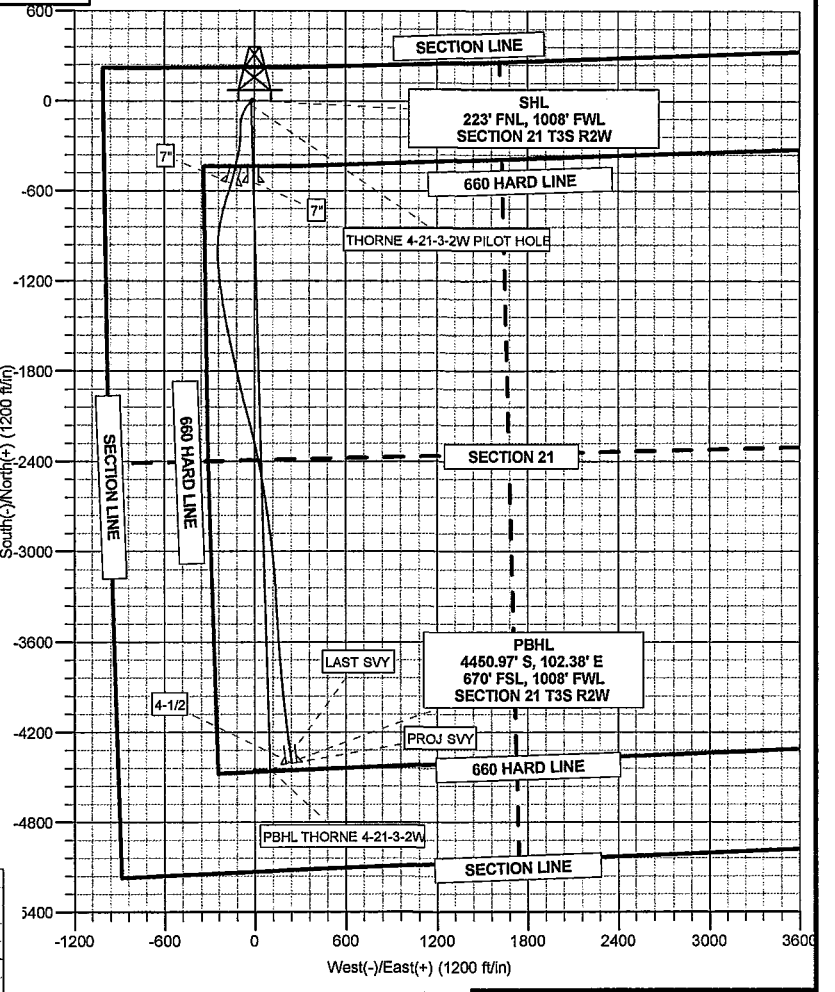
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
7956.83	1.04	287.78	7955.66	-4.14	-20.90	0.00	0.00	3.65	Start DLS 25.72 TFO -128.67
7968.41	2.46	178.41	7967.23	-4.35	-20.99	25.72	-128.67	3.87	Start 5.00 hold at 7968.41 MD
7973.41	2.46	178.41	7972.23	-4.57	-20.99	0.00	0.00	4.08	Start DLS 11.00 TFO 0.00
8788.28	92.10	178.41	8470.35	-543.84	-6.02	11.00	0.00	543.56	Start 3911.27 hold at 8788.28 MD
12699.54	92.10	178.41	8327.00	-4450.97	102.38	0.00	0.00	4452.14	TD at 12699.56



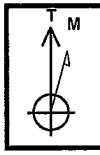






CASING DETAILS

TVD	MD	Name	Size
8460.27	8788.28	7"	7
8319.26	12699.56	4-1/2	4-1/2



Azimuths to True North
Magnetic North: 11.33°

Magnetic Field
Strength: 52254.7snT
Dip Angle: 65.90°
Date: 1/5/2012
Model: BGGM2011

Survey: Survey #1 (THORNE 4-21-3-2W/THORNE 4-21-3-2W CURVE/LAT)

Created By: TRACY WILLIAMS Date: 9:29, February 20 2012

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43-013-51067

Weatherford®

SURVEY REPORT

Report Date: **2/18/2012**
Customer: **Newfield**
Job Name: **4025136**
Well Name: **Thorne 4-21-3-2W ST01**

Field: **Central Basin**
Rig: **Pioneer 68**
Rig Loc: **Rosevelt**

Survey Calculation Method: **Minimum Curvature**

Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True North	**178.68 deg**	**52255 nT**	**65.90 deg**	**11.33 deg**	**0.00 deg**	**11.33 deg**

	Depth	INC	AZ	TVD	NS	EW
Survey Tie-On	**0.00 ft**	**0.00 deg**	**0.00 deg**	**0.00 ft**	**0.00 ft**	**0.00 ft**

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	Well Head EW (ft)	VSect (ft)	Dogleg (deg/100ft)
225.00	0.32	178.88	225.00	-0.63	0.01	0.63	0.14
316.00	0.27	193.91	316.00	-1.09	-0.03	1.09	0.10
407.00	0.32	212.32	407.00	-1.51	-0.22	1.51	0.12
498.00	0.44	202.08	497.99	-2.05	-0.49	2.04	0.15
592.00	0.56	201.83	591.99	-2.81	-0.80	2.79	0.13
684.00	0.75	198.46	683.98	-3.80	-1.15	3.77	0.21
779.00	1.13	199.83	778.97	-5.27	-1.67	5.23	0.40
872.00	0.75	184.08	871.96	-6.74	-2.02	6.69	0.49
965.00	0.75	32.58	964.96	-6.84	-1.74	6.79	1.56
1089.00	1.50	24.21	1088.93	-4.67	-0.64	4.66	0.62
1183.00	2.00	19.45	1182.89	-2.00	0.42	2.01	0.55
1277.00	2.38	17.83	1276.82	1.40	1.56	-1.37	0.41
1371.00	1.88	5.58	1370.75	4.79	2.31	-4.74	0.72
1463.00	1.94	353.33	1462.70	7.84	2.27	-7.79	0.45
1557.00	1.31	343.71	1556.66	10.45	1.79	-10.41	0.73
1650.00	0.56	314.58	1649.65	11.79	1.16	-11.76	0.93
1745.00	0.81	288.33	1744.65	12.33	0.20	-12.32	0.42
1837.00	0.94	280.08	1836.63	12.67	-1.16	-12.69	0.20
1931.00	1.00	278.33	1930.62	12.92	-2.73	-12.98	0.07
2025.00	0.94	283.58	2024.61	13.22	-4.30	-13.32	0.11
2118.00	0.94	283.83	2117.60	13.58	-5.78	-13.71	0.00
2211.00	1.31	281.33	2210.58	13.97	-7.56	-14.14	0.40
2305.00	1.69	268.58	2304.55	14.15	-10.00	-14.38	0.54
2465.00	2.57	251.33	2464.43	12.94	-15.76	-13.30	0.67
2553.00	2.56	254.20	2552.35	11.78	-19.52	-12.22	0.15
2615.00	2.25	242.60	2614.29	10.84	-21.93	-11.34	0.93
2677.00	1.88	217.46	2676.25	9.47	-23.63	-10.01	1.56
2739.00	1.19	221.08	2738.23	8.18	-24.67	-8.75	1.12
2883.00	0.19	308.96	2882.22	7.20	-25.84	-7.80	0.83
2926.00	0.06	161.58	2925.22	7.23	-25.89	-7.82	0.56
3020.00	0.19	129.83	3019.22	7.08	-25.75	-7.67	0.15
3112.00	0.31	195.46	3111.22	6.74	-25.70	-7.33	0.31
3206.00	0.44	221.33	3205.22	6.23	-26.01	-6.82	0.22
3300.00	0.44	38.21	3299.22	6.24	-26.02	-6.84	0.94
3392.00	0.44	63.83	3391.21	6.67	-25.49	-7.26	0.21

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	Well Head EW (ft)	VSect (ft)	Dogleg (deg/100ft)
3487.00	0.25	114.46	3486.21	6.75	-24.97	-7.32	0.36
3580.00	0.38	142.21	3579.21	6.42	-24.60	-6.98	0.21
3674.00	0.69	138.71	3673.21	5.75	-24.03	-6.30	0.33
3767.00	0.69	147.08	3766.20	4.86	-23.36	-5.39	0.11
3862.00	0.38	154.21	3861.19	4.09	-22.91	-4.62	0.33
3955.00	0.88	169.83	3954.19	3.11	-22.65	-3.63	0.56
4048.00	0.44	106.08	4047.18	2.31	-22.18	-2.82	0.85
4141.00	0.56	162.83	4140.18	1.78	-21.70	-2.28	0.52
4235.00	0.94	29.96	4234.18	2.01	-21.18	-2.49	1.47
4328.00	0.38	51.58	4327.17	2.86	-20.56	-3.33	0.65
4421.00	0.44	128.83	4420.17	2.83	-20.04	-3.29	0.55
4514.00	0.75	161.83	4513.16	2.02	-19.57	-2.48	0.48
4608.00	0.38	3.20	4607.16	1.75	-19.36	-2.20	1.18
4701.00	0.06	284.21	4700.16	2.07	-19.39	-2.52	0.40
4794.00	0.69	200.96	4793.16	1.56	-19.64	-2.01	0.74
4886.00	0.19	319.83	4885.16	1.16	-19.94	-1.62	0.87
4981.00	1.13	339.33	4980.15	2.16	-20.37	-2.63	1.00
5074.00	0.50	294.08	5073.14	3.18	-21.06	-3.66	0.92
5167.00	1.13	357.83	5166.13	4.26	-21.47	-4.76	1.09
5261.00	1.19	4.45	5260.11	6.16	-21.43	-6.65	0.16
5353.00	0.56	3.45	5352.10	7.56	-21.33	-8.05	0.68
5447.00	0.06	98.33	5446.10	8.01	-21.25	-8.50	0.60
5540.00	0.56	183.46	5539.10	7.55	-21.23	-8.04	0.60
5633.00	0.50	38.08	5632.10	7.42	-21.01	-7.90	1.09
5727.00	0.31	78.21	5726.09	7.79	-20.51	-8.26	0.35
5821.00	0.25	158.96	5820.09	7.65	-20.18	-8.12	0.39
5915.00	0.81	176.21	5914.09	6.80	-20.07	-7.26	0.61
6008.00	0.31	4.95	6007.09	6.39	-20.00	-6.85	1.20
6101.00	0.44	281.08	6100.09	6.71	-20.33	-7.18	0.55
6194.00	0.75	29.83	6193.08	7.31	-20.38	-7.78	1.06
6288.00	0.63	78.46	6287.08	7.95	-19.57	-8.40	0.62
6381.00	0.88	109.33	6380.07	7.81	-18.39	-8.24	0.50
6474.00	0.94	149.71	6473.06	6.92	-17.33	-7.32	0.68
6567.00	1.19	162.33	6566.04	5.34	-16.65	-5.72	0.37
6660.00	1.69	162.46	6659.01	3.11	-15.95	-3.48	0.54
6753.00	0.75	207.96	6751.99	1.27	-15.82	-1.63	1.38
6846.00	0.81	207.71	6844.98	0.15	-16.41	-0.53	0.06
6940.00	1.13	193.33	6938.97	-1.34	-16.93	0.95	0.43
7033.00	1.19	181.96	7031.95	-3.20	-17.18	2.80	0.26
7126.00	1.00	174.58	7124.93	-4.97	-17.13	4.58	0.25
7219.00	1.44	200.08	7217.91	-6.88	-17.46	6.48	0.74
7312.00	1.25	204.96	7310.89	-8.90	-18.29	8.47	0.24
7406.00	0.06	31.71	7404.88	-9.78	-18.69	9.35	1.39
7499.00	0.94	13.58	7497.88	-9.00	-18.49	8.57	0.95
7592.00	0.88	6.08	7590.86	-7.55	-18.24	7.13	0.14
7685.00	1.06	357.58	7683.85	-5.98	-18.20	5.56	0.25
7778.00	0.44	300.96	7776.84	-4.94	-18.54	4.51	0.96
7871.00	0.88	285.46	7869.84	-4.56	-19.53	4.11	0.51
7983.00	8.11	237.90	7981.43	-8.54	-27.07	7.91	6.74
8015.00	11.72	218.83	8012.96	-12.27	-31.02	11.55	15.11

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	Well Head EW (ft)	VSect (ft)	Dogleg (deg/100ft)
8045.00	15.85	218.94	8042.09	-17.83	-35.50	17.01	13.77
8077.00	19.80	219.55	8072.54	-25.41	-41.70	24.45	12.36
8108.00	23.09	217.78	8101.39	-34.27	-48.77	33.14	10.82
8139.00	26.22	213.30	8129.57	-44.80	-56.26	43.49	11.75
8170.00	30.39	209.67	8156.86	-57.34	-63.91	55.86	14.55
8201.00	33.72	205.99	8183.13	-71.90	-71.56	70.23	12.45
8232.00	37.69	201.85	8208.30	-88.44	-78.86	86.60	14.99
8263.00	40.18	196.73	8232.42	-106.82	-85.27	104.82	13.12
8294.00	41.80	190.31	8255.83	-126.57	-90.00	124.46	14.55
8325.00	43.42	183.59	8278.65	-147.38	-92.52	145.21	15.57
8356.00	45.18	179.55	8300.84	-169.01	-93.10	166.82	10.73
8387.00	48.14	179.19	8322.12	-191.55	-92.85	189.36	9.59
8418.00	52.14	179.76	8341.98	-215.34	-92.64	213.15	12.98
8448.00	55.46	181.91	8359.70	-239.54	-93.00	237.34	12.49
8480.00	59.25	185.74	8376.96	-266.42	-94.81	264.16	15.55
8511.00	60.69	187.64	8392.48	-293.07	-97.94	290.73	7.05
8542.00	62.45	187.83	8407.24	-320.08	-101.61	317.65	5.70
8573.00	66.01	190.08	8420.71	-347.65	-105.96	345.12	13.21
8604.00	69.42	192.62	8432.47	-375.76	-111.62	373.09	13.36
8635.00	73.55	192.96	8442.31	-404.42	-118.12	401.60	13.36
8666.00	78.82	192.97	8449.71	-433.75	-124.87	430.76	17.00
8698.00	83.98	193.04	8454.49	-464.57	-131.99	461.40	16.13
8729.00	86.85	194.35	8456.97	-494.59	-139.31	491.25	10.17
8760.00	86.64	194.37	8458.73	-524.57	-146.98	521.04	0.68
8775.00	86.71	194.47	8459.60	-539.07	-150.71	535.46	0.81
8847.00	90.99	197.64	8461.05	-608.22	-170.62	604.13	7.40
8879.00	90.74	197.75	8460.56	-638.71	-180.34	634.38	0.85
8911.00	91.32	196.27	8459.99	-669.30	-189.70	664.75	4.97
8942.00	92.72	195.82	8458.90	-699.07	-198.26	694.32	4.74
8973.00	93.70	195.24	8457.16	-728.89	-206.55	723.94	3.67
9005.00	95.12	194.07	8454.70	-759.76	-214.62	754.61	5.74
9037.00	95.64	192.21	8451.70	-790.78	-221.86	785.46	6.01
9068.00	95.73	190.45	8448.63	-821.03	-227.92	815.56	5.66
9100.00	94.69	188.62	8445.72	-852.45	-233.20	846.86	6.56
9132.00	93.46	187.57	8443.45	-884.05	-237.70	878.34	5.05
9163.00	91.85	185.33	8442.01	-914.82	-241.18	909.02	8.89
9195.00	92.12	183.75	8440.90	-946.70	-243.71	940.84	5.01
9227.00	91.48	180.94	8439.90	-978.66	-245.01	972.75	9.00
9258.00	90.71	179.17	8439.30	-1009.65	-245.04	1003.74	6.23
9291.00	90.79	177.93	8438.87	-1042.63	-244.21	1036.73	3.77
9323.00	90.06	175.55	8438.64	-1074.58	-242.39	1068.71	7.78
9355.00	90.93	175.58	8438.36	-1106.48	-239.92	1100.66	2.72
9387.00	90.25	174.03	8438.03	-1138.35	-237.02	1132.59	5.29
9418.00	89.82	173.66	8438.01	-1169.17	-233.69	1163.48	1.83
9450.00	90.44	173.00	8437.94	-1200.95	-229.98	1195.34	2.83
9482.00	90.80	172.64	8437.59	-1232.70	-225.98	1227.17	1.59
9514.00	90.49	171.97	8437.23	-1264.41	-221.69	1258.97	2.31
9546.00	89.57	170.89	8437.21	-1296.05	-216.93	1290.71	4.43
9578.00	91.17	171.63	8437.01	-1327.68	-212.06	1322.44	5.51
9611.00	91.54	171.81	8436.23	-1360.32	-207.31	1355.19	1.25

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	Well Head EW (ft)	VSect (ft)	Dogleg (deg/100ft)
9643.00	91.91	171.45	8435.26	-1391.97	-202.66	1386.93	1.61
9675.00	91.67	170.35	8434.26	-1423.55	-197.60	1418.62	3.52
9707.00	91.97	169.43	8433.25	-1455.04	-191.98	1450.23	3.02
9739.00	92.96	169.61	8431.87	-1486.47	-186.17	1481.79	3.14
9771.00	92.53	169.05	8430.34	-1517.88	-180.25	1513.33	2.20
9836.00	93.33	167.75	8427.02	-1581.47	-167.20	1577.20	2.35
9867.00	93.21	167.43	8425.25	-1611.70	-160.55	1607.57	1.10
9900.00	92.04	167.55	8423.74	-1643.88	-153.41	1639.91	3.56
9932.00	91.98	167.26	8422.61	-1675.09	-146.43	1671.27	0.92
9964.00	92.35	166.70	8421.41	-1706.25	-139.23	1702.59	2.10
9996.00	92.34	166.30	8420.10	-1737.34	-131.76	1733.84	1.25
10028.00	92.59	167.37	8418.72	-1768.46	-124.48	1765.13	3.43
10060.00	93.70	168.03	8416.96	-1799.68	-117.68	1796.49	4.03
10092.00	93.53	168.76	8414.95	-1830.97	-111.25	1827.92	2.34
10156.00	90.68	166.20	8412.60	-1893.39	-97.39	1890.64	5.98
10188.00	91.41	165.59	8412.01	-1924.42	-89.59	1921.85	2.97
10221.00	93.26	166.30	8410.67	-1956.40	-81.58	1954.00	6.00
10253.00	92.53	165.33	8409.05	-1987.39	-73.75	1985.16	3.79
10285.00	91.85	164.18	8407.83	-2018.24	-65.35	2016.20	4.17
10317.00	91.91	164.40	8406.78	-2049.03	-56.69	2047.18	0.71
10349.00	91.05	164.57	8405.95	-2079.85	-48.13	2078.19	2.74
10381.00	90.68	164.32	8405.47	-2110.67	-39.55	2109.20	1.40
10414.00	91.60	165.47	8404.81	-2142.53	-30.95	2141.25	4.46
10445.00	92.22	166.07	8403.78	-2172.56	-23.33	2171.44	2.78
10477.00	91.73	166.12	8402.68	-2203.60	-15.65	2202.66	1.54
10510.00	91.36	165.96	8401.79	-2235.62	-7.69	2234.85	1.22
10541.00	91.76	166.82	8400.94	-2265.73	-0.40	2265.12	3.06
10574.00	92.22	167.59	8399.80	-2297.89	6.90	2297.44	2.72
10606.00	92.41	167.96	8398.50	-2329.14	13.68	2328.84	1.30
10638.00	91.42	167.72	8397.44	-2360.41	20.41	2360.25	3.18
10671.00	90.93	168.29	8396.76	-2392.68	27.27	2392.67	2.28
10702.00	91.42	168.79	8396.12	-2423.06	33.43	2423.18	2.26
10735.00	92.90	169.58	8394.88	-2455.44	39.61	2455.71	5.08
10767.00	93.40	170.35	8393.12	-2486.91	45.18	2487.29	2.87
10799.00	92.10	170.72	8391.59	-2518.43	50.44	2518.93	4.22
10831.00	90.79	170.70	8390.78	-2550.00	55.60	2550.61	4.09
10863.00	89.63	169.86	8390.66	-2581.54	61.00	2582.26	4.48
10895.00	90.06	169.85	8390.75	-2613.04	66.64	2613.89	1.34
10927.00	93.08	172.34	8389.87	-2644.64	71.59	2645.59	12.23
10959.00	92.96	172.52	8388.19	-2676.32	75.80	2677.35	0.68
11022.00	90.43	171.25	8386.32	-2738.65	84.69	2739.88	4.49
11054.00	89.03	170.88	8386.47	-2770.26	89.66	2771.59	4.53
11086.00	90.31	171.24	8386.66	-2801.87	94.63	2803.31	4.16
11118.00	92.38	173.52	8385.91	-2833.58	98.87	2835.10	9.62
11150.00	91.36	173.16	8384.86	-2865.34	102.58	2866.95	3.38
11182.00	89.63	171.57	8384.59	-2897.06	106.83	2898.75	7.34
11214.00	90.99	173.42	8384.41	-2928.78	111.01	2930.56	7.18
11247.00	91.67	174.37	8383.65	-2961.58	114.52	2963.44	3.54
11279.00	89.82	173.36	8383.23	-2993.40	117.94	2995.32	6.59
11311.00	90.00	172.64	8383.28	-3025.16	121.84	3027.16	2.32

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	Well Head EW (ft)	VSect (ft)	Dogleg (deg/100ft)
11343.00	92.28	174.58	8382.64	-3056.95	125.40	3059.03	9.35
11375.00	91.54	175.38	8381.58	-3088.81	128.20	3090.94	3.40
11407.00	91.50	176.17	8380.73	-3120.71	130.56	3122.89	2.47
11471.00	91.17	175.51	8379.24	-3184.52	135.20	3186.79	1.15
11535.00	93.58	177.14	8376.58	-3248.33	139.30	3250.68	4.54
11600.00	92.59	177.01	8373.09	-3313.15	142.61	3315.56	1.54
11664.00	92.78	176.61	8370.09	-3376.98	146.17	3379.45	0.69
11728.00	94.76	177.88	8365.88	-3440.76	149.24	3443.29	3.67
11760.00	94.14	177.15	8363.40	-3472.64	150.62	3475.18	2.99
11792.00	92.66	176.55	8361.50	-3504.53	152.38	3507.11	4.99
11824.00	91.23	175.75	8360.41	-3536.44	154.52	3539.06	5.12
11856.00	93.35	176.34	8359.14	-3568.34	156.73	3571.00	6.88
11887.00	94.26	176.64	8357.08	-3599.21	158.62	3601.91	3.09
11919.00	93.09	175.47	8355.03	-3631.07	160.82	3633.81	5.17
11951.00	92.04	174.74	8353.60	-3662.92	163.55	3665.71	4.00
11983.00	94.07	175.58	8351.89	-3694.76	166.24	3697.60	6.86
12014.00	94.14	175.29	8349.67	-3725.58	168.71	3728.48	0.96
12046.00	94.20	175.32	8347.34	-3757.39	171.32	3760.34	0.21
12078.00	93.17	175.46	8345.29	-3789.22	173.88	3792.22	3.25
12141.00	91.67	174.72	8342.63	-3851.93	179.27	3855.03	2.65
12204.00	92.84	173.53	8340.15	-3914.55	185.71	3917.78	2.65
12268.00	92.78	174.81	8337.01	-3978.14	192.21	3981.51	2.00
12331.00	92.65	174.53	8334.03	-4040.79	198.05	4044.28	0.49
12394.00	91.54	172.78	8331.72	-4103.36	205.01	4107.00	3.29
12457.00	92.03	173.35	8329.76	-4165.87	212.61	4169.66	1.19
12521.00	93.53	173.52	8326.66	-4229.37	219.92	4233.32	2.36
12584.00	91.17	171.70	8324.07	-4291.79	228.02	4295.90	4.73
12640.00	92.78	171.66	8322.14	-4347.17	236.12	4351.45	2.88

Weatherford surveys from 225 ft MD to 12640 ft MD.
TD at 12700 ft MD.
The total correction is 11.33 deg relative to True North.